APPENDIX

THE THIRTY-FIFTH VOLUME

NEW ARRANGEMENT

CRITICAL REVIEW.

ART. I .- Mémoires de l'Institut National des Sciences et des Arts. Memoirs of the National Institute of Sciences and Arts. Vol. III. Paris. 1801.

IN our review of the former volumes of this collection, of which each of the three classes has published two, we were compelled to consider them as inferior to their predecessors of the Royal Academy, and to remark that the new institute followed with unequal steps: and though in the present volume we find some memoirs of deep and recondite research; though a few in other branches are interesting; yet, on the whole, the merit is not so great as to induce us to soften the censure which justice has already drawn from us; and we must still wait for the meridian of a brightness which at present scarcely shines

with more than a morning lustre.

We have already explained the nature of the history of the Institute, and need not repeat it .- The first article in the volume before us is a report of a memoir presented to the class by M. Callet. The commissioners were MM. Bossut and Le Grange; and the memoir is entitled 'Considerations on the Summation of certain periodical Series;'-series so called, because they are composed of periods which return without variation to infinity, and form the mean between converging and diverging series. M. Callet endeavours to show, that, by the generation of this kind of series, they can only represent vague and indeterminate quantities. On the whole, he seems to have succeeded in his object, and the commissioners think that the memoir merits publication.

The second memoir, of which a report is given in the class of Analysis, is by M. Biot, and entitled 'Considerations on the Integers of Equations with finite Differences.' The author's object is to generalise some methods, and resolve some difficulties,
APP. Vol. 35.

relative to the theory of differential equations raised, and to the multiplicity of their integers. The commissioners MM. la Place and Prony speak with great respect of this memoir, and the author's other labours. M. Biot seems to be a young man of considerable promise, and has since, we apprehend, been

elected member of the National Institute.

The next class is that of Mechanic Arts; and we find a report of a new Telegraph, the invention of MM. Bréguet and Brétancourt, by MM. la Grange, la Place, Borda, Prony, Coulomb, Charles, and Delambre. The machine is peculiarly simple, consisting only of a perpendicular and a moveable arm, called the arrow. The position of the arrow, and the angle it makes with the horizon, express whatever is wanted from the telegraph. The commissioners speak of it with much respect; and, by the addition of lanterns, it is adapted for conveying intelligence by night. A plate would have greatly facilitated the comprehension of the reader.

In the class of Philosophy, we find the remarks of M. Baussard on the Tides of Teneriffe, who found them very irregular. Lalande fixed the period of high water at noon. Other authors have supposed it to be at three o'clock. We suspect Lalande

to be nearest the truth.

In the class of Chemistry, there is a report on a memoir of M. Cossigny, by MM. Fourcroy and Guyton. Its object is to recommend the cultivation of woad in the Isle of France, from which he proposes to prepare a true indigo. A similar substance may, it is said, be obtained from the blue scabious. The memoir, however, affords no certain process or plan, but only proposals and inquiries; and the author seems unacquainted with the latest and best works on the subject. On the whole, the commissioners applaud his zeal and patriotism, and wish him to pursue the inquiries more pointedly and scientifically.

We next find a report by MM. Bayen, Pelletier, Vauquelin, Chaussier, and Lelievre, on a metallic ingot, sent to the legislative body by the Commission of Finances. They requested to know its composition, and whether it could be imitated. The object we are unacquainted with. The metal was white, and, when broken or filed, the colour was yellowish; its specific gravity 9.4776. The commissioners found it composed of nearly equal parts of silver and copper, with a very little arsenic,

and about 0.04 of gold.

'An Abstract of a Report respecting Colours for Porcelain, by M. Dihl,' follows. The great object pursued is to discover substances whose colour will not change by vitrification. Few of these only have hitherto been known, and the preparation has been generally concealed. The commissioners, MM. Foureroy, Darcet, and Guyton, think that the author has in general succeeded, and greatly extended our knowledge in this branch of chemistry.

The same colours appear, in their opinion, to be equally useful in painting in oil, on cloth and other substances, and to be scarcely impaired by time or the usual causes of imperfection.

The history of the prizes follows, of which few have been distributed: of the first three questions no candidate has appeared for the two former. That on the orbit of a comet was fully answered by Burckhard. The titles of the memoirs which the Institute think worthy of being printed in the Memoirs of the Savans Etrangers are next introduced; and to these succeed the inventions, machines, and preparations approved by the society, and a list of the printed books presented to it. The éloges are those of the venerable Daubenton and of Lemonnier, by M. Cuvier. The life of Daubenton is peculiarly valuable; and we regret that we cannot, from its extent, notice even the leading facts.

The first memoir is that so often mentioned, 'An Inquiry into the Laws of Affinity, by M. Berthollet,' which is continued in different parts of the volume. The second is entitled 'Chemical Considerations on the Use of Oxyds of Iron in dying Cotton, by M. Chaptal.' Cotton has a very considerable affinity with oxyd of iron, so as to attract the whole of it from a bath. It is usually employed in a state of solution; and the acetous, or any of the mineral acids, is resorted to for this purpose. The acetous is preferred chiefly, because it does not destroy the cloth, as the other metallic salts will do, unless it be immediately immersed in water. M. Chaptal proceeds to show what colour the oxyd of iron will produce, without addition or preparation, or when employed with madder or the astringent principle. The colour of iron is a very solid one; but so greedy is the cotton of this colour, that it soon becomes harsh to the eye, and injures the stuff. The colour which it gives is the shammy. When the iron is precipitated, the colour is of a dirty irregular green, which however soon becomes yellow. The management of this colour, so that it may unite with the softer and more uniform colour of vegetables, is particularly described. The management of the iron with the astringent principle is also interesting, but too long for this place. It has been supposed, that, by increasing the proportions of sumach, alder, or the green oak, the use of galls may be superseded. This is indeed the case with wool or silk; but with cotton the colour is dry, thin, and less solid.

'III. A Memoir on the Motions of the Orbits of the Satellites of Saturn and Uranus (the Georgium Sidus), by M. la Place.' On comparing the results of the observations of Cassini and Bernard, Lalande concluded that the node of the orbit of the last satellite of the former planet, which is not like those of the first six satellites in the plane of the ring, but a little inclined to it, had gone back, in the period of seventy-three years, 60° 50', about 5' 37" annually. M. la Place, in the present memoir, inquires

what would be the result of the theory of gravitation. He finds that the first six satellites are kept in the same plane by the attraction of Saturn and his rings; but the distance, and perhaps the size of the seventh, renders it subject to other powers, and particularly of the Sun. The subject, however, is pursued in too minute and scientific analysis for an abstract; nor have the

observations been yet sufficiently numerous or exact.

IV and V. Second and third Memoirs on the Use and Utility of Mercurial Preparations in the Small-Pox, by M. Dessessartz. The first memoir on this subject we noticed in our 33d volume, p. 479. In the second, the author examines the question historically; that is, he traces, in different authors, numerous instances in which mercury has been given previous to the disease, and on its appearance. In these the eruptions have either not appeared, or been remarkably few, and the whole disease peculiarly mild. The event the author, after an inquiry somewhat too minute and prolix, thinks to be owing to the medicine, as a specific. The facts advanced are, at least, numerous and valuable. In the third memoir, our author endeavours to show that the mineral preparation has been, in his own practice, successful, and lays down the rules for conducting it. Our medical readers, and particularly the advocates for the cow-pox, will not expect us to detail more particularly the plans of M. Dessessartz laid down in the memoir before us.

VI. A theoretical and practical Determination of the Powers which bring different Needles, saturated with Magnetism, to the magnetic Meridian, by M. Coulomb.' This memoir is supplementary to the author's former labours, which we were unable to follow, from the difficulty of abridgement, and the impossibility of extracting any part with advantage. Whatever be the nature of the magnetic fluid, the author finds, that, from its known

laws, it may be subjected to calculation.

'VII. Memoir on the Theory of the Moon, by M. la Place.' This very scientific memoir relates to a motion of nutation in the lunar orbit, analogous to that of the terrestrial equator, the period of which is that of the motion of the nodes of the moon. The terrestrial spheroid, by its attraction on the satellite, produces an oscillation on the lunar orbit, as the attraction of the moon produces an oscillation on our equator.

VIII. Experiments to ascertain the Cohesion of Fluids, and the Laws of their Resistance, in very slow Motions, by M. This memoir is truly excellent; but the whole depends on minute experiments and calculation, so that we cannot

even convey a faint idea of it.

'IX. A Memoir on the Cupellation of Lead, in the great Way, containing some Reflexions on the Inconveniences resulting from the Cupels made from Ashes; followed by a new œconomical Method of constructing these Cupels; by M. Duhamel.

The cupellation of lead is the mean of separating the silver from it; and the principle on which this is effected is the property of the glass of lead to penetrate different substances, and leave the silver, which, in the same heat, will not be oxydated. The vessels in which this is performed are called cupels, and are made from the ashes of bones or of wood. As they are soon saturated with the lead, they are expensive in the usual management. Other methods have been adopted in England; and our

author refines still further upon them.

'X. An Essay on the Analysis and Re-composition of the two fixed Alkalis, and of some of the Earths supposed to be simple, by MM. Guyton and Desormes.' We announced this discovery some time since; but we own that we expected a more detailed and more scientific support of it. The whole amounts to little more than suspicion—yet a suspicion not wholly without foundation; the great principle of which is, that, in different processes with kali and soda, lime and magnesia respectively appeared; and on repeating the experiment with the same alkalis, there seemed to be no limits to the appearance of the two earths. Many of M. Desormes' arguments are derived from the changes produced in consequence of vegetation. These, though deserving a better appellation than theoretical, are however not so clearly established as to afford a sufficient foundation to a doctrine whose influence would be very extensive. We shall translate what M. Guyton remarks from himself. It is almost the whole of his share of the memoir, which more particularly refers to the subject.

New processes have been employed. They have been varied and repeated frequently; and, to confine the conclusion to precise facts, there can be no doubt that, by treating pot-ash with different chemical agents, when the salt is perfectly pure, lime may be separated, and that the operations which produce this consequence are those in which the affinities of hydrogen are chiefly conspicuous. I owe this conviction to two

experiments.

The first is the decomposition of oxygenated muriat of pot-ash by the phosphoric acid. Infusing this mixture in a crucible of platina, the mass is re-dissolved; and if the excess of acid be saturated with ammonia, a phosphat of lime is precipitated; and this operation may be repeatedly performed on the same quantity of muriat, without any diminution of the product. The second experiment is a process in which pot-ash infusion acts on charcoal. A considerable portion assumes the form of carbonic acid; and the combustion of hydrogen is visible, which cannot be renewed by adding water to the mixture when the pot-ash is saturated with carbonic acid; the remainder

is pot-ash in the state of carbonate; and lime, which the oxalic acid immediately separates from the nitrie.'

The rest of the article, we have said, consists of what may be styled presumptive proofs, and experiments by no means conclusive. We have not found that the subject has been reconsidered; and, indeed, doubts will easily suggest themselves to the experienced chemist. We must however wait for the result

of further and more decisive experiments.

'XI. Memoir on the Changes which take place in the Organs of Circulation in the Fetus when it has once begun to breathe, by M. Sabatier.' These doctrines are by no means new, though not generally known. Instead of the right and left auricle of the heart forming one cavity by means of the foramen ovale, in order that the blood from the placenta may be mixed with that which has passed through the lungs, M. Sabatier thinks that the blood from the lower vena cava passes into the left auricle, and that from the superior into the right; so that all the blood returns, secondarily, to the placenta before it has re-commenced its course, nearly as in the adult: it traverses the whole of the aorta; and the fluid, in its circulation, describes the figure of 8. This doctrine was published by the author in 1774, in the Memoirs of the Academy, and has been repeated in different publications; but is not very generally known, except on the continent. The cause of the commencement of respiration is examined somewhat more accurately than in other writers, but more diffusely. The principle of M. Sabatier is, that, from the difference of position, the abdominal viscera fall down, and draw with them the diaphragm; thus expanding the lungs, and bringing the intercostal muscles, by consent, into action. The vessels of the lungs are thus more completely filled; and the blood is carried into the right auricle so copiously, that the valve of the foramen ovale is closed, and cannot admit the blood brought to it by the inferior cava. The proof of the falling down of the viscera, thus described, and its consequences, is drawn from a minute anatomical investigation of the direction of the aorta and its first ramifications. In the fetus, for instance, the common trunk of the subclavian and right carotid arises from the most elevated part of the arch of the aorta; while the left subclavian 'answers' to its lowest part, contrary to what is observed in the adult. When the liver, too, was raised into the cavity of the thorax by pressing up the diaphragm, the hepatic veins were nearer to the foramen ovale, and the blood passed into the heart in an almost horizontal direction: but, after the liver had taken its proper situation, they were at a greater distance, and the passage was more oblique. For a similar reason, the canalis arteriosus makes, after birth, a more

acute angle with the aorta; and its great elasticity, or greater muscular power, (for its parietes are thick and solid) soon occasions its contraction into a ligament. The umbilical arteries are obliterated in consequence of these changes and the extension of the legs, which straiten the folds of the femoral arteries, and produce a freer circulation in the lower extremities: whence, he might have added, arises a more rapid increase of their bulk soon after birth.

'XII. Memoir on the Art of making Gun-Flints, by M. Dolomicu.' It is, we believe, generally known that gun-flints are
struck into their usual form by a lucky or a dextrous blow of the
hammer. The agate flints are ground on a wheel. The cheapness of gun-flints supports the account of our author, which is
truly astonishing, viz. that a good workman will prepare and
finish a thousand gun-flints in three days. It is not a very nice
or difficult task. M. Dolomieu describes the silex pyromachus,
as he styles it, very particularly: it appears to be a very pure
siliceous stone, and the same as is usually found in calcareous
mountains. He seems to think it almost peculiar to France:—we
dare not say that the facility of breaking may not be confined to
a few countries: but a silex of this purity is extremely common.

AXIII. A Memoir on Mines, by M. Marescot.' The chief object of this memoir is to show that the explosive force of gun-powder in mines is increased by not entirely filling the chamber. The expansion of the surrounding air is supposed, with some reason, to increase the power; but the experiments are neither finished nor conclusive.

'XIV. An Inquiry into the Cause of the connate Umbilical Hernia, by M. Lassas.' This memoir is, as usual, diffuse, but instructive. The swelling is not, strictly speaking, a hernia, but a tumor arising from the vast bulk of the liver, rupturing the linea alba, and leaving sometimes the liver, at others the small intestines, covered only by the peritonæum, exposed to view. It is usually fatal: but the little that art can effect is well detailed in the memoir before us.

Floreal, year VII, by M. Delambre.' This memoir is incapable of abridgement; but it is copious, profound, and instructive.

"XVI and XVII. Two Memoirs on new methodical Arrangements of Birds and mammiferous Animals, by M. la Cépède."

These memoirs show the author to possess comprehensive views of nature, and to hold no mean rank among natural inquirers. His work on serpents was a juvenile one; and some parts of his ichthyological system we have found reason to blame; yet, on the whole, he is a philosopher of considerable attainments; and his reflexions on arrangement, in general, are highly valuable. These we cannot enlarge on, but shall give the out-

line of his two systems, and begin with the mammalia, as the

more important class.

The mammalia are arranged in two divisions: the first, those without membranous wings or fins; the second, those with wings. We are much pleased with this distinction, because we avoid two incongruities, that of classing the bats with human beings, and the whales with land animals in general. The subdivisions are taken from the form of the extremities; and the first is the quadrumanes, four feet resembling hands, and the pedimanes, two feet resembling hands. We thus find the kangaroo and the opossum with the monkeys; but some incongruity cannot perhaps be avoided in every part of a system. The subordinate divisions are taken from the teeth. The third, fourth, fifth, sixth, and seventh subdivisions, are the plantigrades, an articulated sole, adapted for walking; digitigrades, animals that walk on toes; pachydermes, animals whose toes are inclosed in a thick skin, and divided into more than two hoofs; bisulci, or ruminating animals with two hoofs; solipedes, those with one only; and, which is the last subdivision, and contains one genus alone, equus.

The second division contains the cheiropteres, animals whose fore feet are furnished with membranes like wings, and the nageoires, those with fins. In the former we find the American owl, defined by the four claws of the fore-feet greatly elongated. The finned animals are divided into the empetres, those whose fore-feet are in the form of fins; and the cetacea, ani-

mals without any feet behind.

Birds are divided into two sub-classes, which may be in general styled land- and water-birds. The former are more strictly limited by the following definition:- ' the bottom of the leg furnished with feathers, toes in no instance wholly united by a large membrane: the latter, ' by the bottom of the leg wanting feathers, or, several of the toes being united with a large membrane.' The principal divisions are taken from the situation of the toes, the subdivisions from the toes and claws, and the orders from the beaks. The first subdivision comprises the climbers, chiefly the parrot kind, with large strong toes: the second division is divided into the birds of prey, with very strong and crooked claws; the sparrows, 'with claws slightly bent, toes very free, or united only the length of the first phalanx; the platypodes, flat feet, with the external toes united almost through their whole length: these are the birds with large bills, as the buceros, &c.; and the gallinaceous, with the toes of the fore-feet united at their base by a membrane.

The divisions of the second sub-class are taken, as before, from the situation of the toes; the subdivisions from the membranaceous connexion; and the orders from the beaks. The

first subdivision are, the water-birds, whose fore-toes are entirely united by a membrane; the latiremes, whose fore-toes are united by a large membrane; the river-birds, whose toes are united at their base by a membrane. The second division contains the running birds, as the ostrich, dido, &c. These are not all water-birds; so that M. la Cépède has not actually adhered to the distinction of terrestrial and aquatic. The two memoirs now noticed are the last of the volume; and we have no reason to think that the fourth volume of this collection has appeared.

We now enter upon the third volume published by order of the department of Moral and Political Sciences. This, as usual, consists of two distinct sections—its history, and its memoirs. The former, occupying seventy-five pages, exhibits an abridged account of the transactions of the class, a notice on the life and writings of M. Baudin, the prizes proposed, and a list of books presented. We must pay some attention to this part of the

volume, before we proceed to the memoirs.

In the account of the transactions, we find that the labours of the class have been considerably directed to the formation of a system of pasigraphy, or universal language, founded not upon a uniformity of tongue, but of signs selected for the representation of ideas. This visionary attempt has been so frequently brought forward in all ages from the times of the Greeks and Romans to the present, and so frequently relinquished as an impossibility, even by its most sanguine inventors, that we have no expectation of success from any new exertions. Four or five different theories upon this abstruse subject, all of them said to be highly ingenious, have nevertheless been presented to the class, which has not only attended to their development, and discussed their respective merits in a variety of sittings, but has named a committee from its body for investigating still further the question of their practicability.

To another committee has been referred a project of M. Buttet, equally fugacious and chimerical; which, considering words as algebraic expressions, consists in resolving them by an algebraic analysis. According to this fanciful system, every individual word is compounded of one or more prepositions, of a proper radical and termination: of these elementary members the preposition is regarded as a co-efficient, and the termination as a quotient. M. Buttet investigates the value of the former, in connexion with that of the latter; and combining these three imaginary data of a term, its preposition, its radical, and its termination, he affects to deduce, from a series of rules constructed for the occasion, the most precise meaning of which the term is capable, and thus conceives that he is equally promoting the rectification of ideas and the perfection of language.

The labours of the Institute appear to more advantage in propounding for solution a variety of queries, many of them well digested and of considerable moment, to the Institute established a few years since by Bonaparte in Egypt, when, in the zenith of his victorious career in that quarter of the world, he was ambitious of adding the character of Mæcenas to that of Cæsar. Of the answers we are not as yet presented with any statement; and we are fearful that the destruction of the establishment by posterior circumstances—an event which we cannot but deplore, as it is not likely to be replaced by any other nation—will effectually preclude our attaining the information we might otherwise have possessed.

To inquiries of this description the National Institute has subjoined others, concerning the mode of commercial communication with the East anterior to the discovery of America and the Cape of Good Hope. It is well known that at this period—to wit, from the twelfth to the fifteenth century—such communication was principally maintained by the Levantine states, and especially the Genoese; and to the public archives of the latter therefore, to the libraries of the archbishop and abbots of the republic, the National Institute has applied for many important documents they are supposed to possess; while it has referred the farther investigation of the subject to a committee composed

of MM. Bouchard, Papon, De Salles, and Lévesque.

In our last article we noticed that much attention had been paid by the class of Moral and Political Sciences to the important subject of burials, both with regard to the health of the public and a decent veneration for the deceased. From the history before us, we learn that this attention has been carried to a still greater extent; that many valuable memoirs have been received, in answer to several very pertinent questions addressed to the nation at large; and that a committee has been appointed. to consider of them generally, and to concentrate their contents into one homogeneous and practical paper. We cannot transcribe all the regulations which are herein proposed; it is enough to assert that many of them evince much political wisdom, and discover much sensibility of heart: some are, nevertheless, far too fanciful, and the whole purposely abstracted from all considerations of religion or a future state. We must make some allowance, however, for the fashion of the period in which they were drawn up. The profession of religion has of late been regaining its ascendency; and as the combination of religious tenets of every description is admitted in their fullest extent with the proposed code, there can be no. doubt that such a combination will instantaneously be effected.

Of the remaining labours of the class, the chief we have to notice are, first, an attempt to revivify an examination proposed as early as the year 1734, by the Academy of Inscriptions and

Belles Lettres, as to 'What has been the state of letters in France from the age of Charlemagne to that of Francis I.?' and, secondly, an account of a decimal telegraph, invented conjointly by several ingenious artists; the basis of which is to designate every word in the French tongue by an appropriate cipher; the correspondence of which words and ciphers are to be learned by a dictionary, also devised and presented to the class by the same artists.

The department of Moral and Political Sciences has been truly unfortunate in the loss of several of its most valuable members and associates since the date of its last volume. Of the latter it has to commemorate the death of four—MM. Gautier de Sibert, Cafarelli du Falga, La Forbonnais, and D'Arçon; and of each we meet with an honourable mention, in a brief but appropriate biography. To the former it is a custom of the Institute to allot a larger space, in an express chapter, entitled a notice. Such a notice we now have, in consecutive order, on the life and writings of M. Baudin, by the secretary, M. Champagne. The class has indeed to deplore the death of two other resident members, MM. Creuzé-la-Touche and Legrand d'Aussy; the latter of whom is already known by name to the majority of our readers, from the analysis we have given of his contributions to the common stock of labour. But the biography of these philo-

sophers is deferred till a future volume.

To Baudin the National Institute has been much indebted. He was one of its most active members; and a slight glance over our own articles upon this subject will show that his memoirs are among the most valuable it has produced.—Peter Charles Lewis Baudin was born at Sedan, October 18, 1748, of parents who were allied to the first families of the magistracy. He was designed for the bar, and was in consequence very sedulously educated under a tutor who had been the pupil of Rollin and Coshin, and from whose system of ethics he acquired a severity of morals which procured him the name of Cato. He completed his education at Paris, in the college of Louis le Grand, commenced the profession of advocate, and, in spite of the most seductive offers to the contrary, maintained the cause of the exiled parliaments in 1770. However, at the instigation of his friend Gilbert de Voisins, whom he tenderly loved, he quitted the bar a few years after he had been admitted to it, to become the instructor of his friend's children. In 1783 he married, returned to Sedan, occupied a variety of posts of honour in his native town; was afterwards elected into the legislative assembly, by the suffrages of the department of the Ardennes; next into the national convention; and, finally, into the council of ancients. With less violence than most of his collegues, Baudin appears to have possessed far more honesty as well as

perspicuity of mind. In the performance of his respective duties he was indefatigable. There were few national committees of which he was not appointed a member, and none in which he did not take a prominent part. When, on the first establishment of the National Institute, he was nominated a member, he did not relax from the superior demands of his political functions; yet was he punctual in his attendance at its sittings, and eager, by his own writings, to promote its literary reputation. It was Baudin who first protested against the indecency of the common mode of sepulture.

'At the first movement,' says his biographer, 'of his virtuous indignation against so cruel an indifference, a committee was unanimously appointed, of which Baudin was a member. In two memoirs, full of philanthropy, his eloquent voice impeached this truly moral depravation, which drives back into eternal oblivion those sacred spoils of the dead, without honouring them with a tear, without conceding to them those tender remembrances which are so imperiously demanded by nature and by gratitude.'

The memory of Baudin deserves therefore to be cherished by his countrymen. May his virtues form an object of their imitation! He died suddenly on the twenty-first of Vendémiaire, year VIII, shortly after the debarkation of Bonaparte at Fréjus; overpowered, in the opinion of M. Champagne, by the excess of joy which such an event, in conjunction with several other circumstances equally advantageous or glorious to his country, had produced upon his mind; but more probably, though more prosaïcally, from a sudden paroxysm of the gout, to which, not-withstanding the simplicity of his life, and the multiplicity of his literary pursuits, he had long been a martyr.

In the chapter containing the catalogue of prizes, which immediately follows the biography of M. Baudin, we find that the greater number of those proposed in the last volume are renewed in the present, with little or no alteration in the terms, in consequence of no adequate solutions having hitherto been returned. The two following questions are new. The prize for each—but their amount in either case is not mentioned—is to be distri-

buted at the public sitting, Messidor 15, year IX.

' By what causes has the spirit of liberty been developed in

France from the period of Francis I. to the year 1789?

What are the principal changes (geographical) which the globe has sustained, and which are either indicated or demonstrated by history?'

The history of the class closes with the list of printed books presented to it since the publication of its last volume. These

consist of fifty-four articles only—none of them very recondite, and few of them very valuable. All but one, which is an American publication, are indeed of the language of the country, and of very modern date. We proceed to the Memoirs.

'I. Discourse on social Science. By M. Cambacérès.'
Another leaf taken out of the Social Contract of Jean-Jaques.

'Mutual want engenders the first links of society. Incapable of sufficing for himself, man is compelled to seek his fellow It is want which whispers to mankind to unite their faculties, that every one may enjoy the faculties of the whole. Hence sciences and arts—all produced from the same mother, to embellish and exalt her—all the progeny of Nature, who, by the aid of Genius, unfold their talents, and generate a new nature in their turn. But, without protection and personal safety, of what use are these first links of society, since our chief want is to defend ourselves against ourselves? Hence, the first social relations being once established between individuals, it is necessary to introduce a rein,-to impose a rule of restraint. Thusauthority issues and commands all by laws. Frequently impotent however, and more frequently still improvident, the law stands in need of an assistant, a helpmate. The wise and benevolent Author of Nature has given her morality, - imperious governess of mankind by hopes and fears. Arts, laws, morality,-in these three behold, then, the chief means of civilisation, the true elements of social science!'

All this has been said a thousand times before, and in nearly the same language.

4 II. Geographical Considerations on the Southern Limits of

French Guiana. By M. Buache.'

By the eighth article of the treaty of Utrecht, the northern boundary of the Brasils, or territory appertaining in that quarter to the Portuguese, is determined by the river Oyapok; and the object of the present memoirist is to prove that there are two rivers of this name, one situated on each side of the equator, at a distance from each other of something more than five degrees; and that the Portuguese, by pretending that the treaty of Utrecht refers to the northern Oyapok, have not only unjustly claimed possession of some of the most valuable part of Guiana, which ought to appertain to France, but have possessed themselves of a country to which they have no possible pretensions, and which they never were intended to possess by the treaty of Utrecht, whose decision relates to the southern Oyapok, or that situated in the embouchure of the river Amazon. This subject is well managed. M. Buache has read much, and examined closely; but it is probable that his arguments would have had little avail, had they not been powerfully seconded by the talismanic threats of Bonaparte. The writer observes, however, that the same name of

Oyapok, by which these two distinct rivers are confounded together, is referred to in several treaties between Spain and Portugal; but that the Oyapok is in these occasionally denominated, from its discoverer, the river of Vincent-Pinson. His object is to decide to which of the two Oyapoks the name of Vincent Pinson will best apply; and he clearly proves that it can only appertain to the southern Oyapok, for that Vincent-Yanez-Pinson never touched, as is obvious from all the accounts we have of his voyage, on the northern side of the equator. He refers, moreover, to the Spanish and Portuguese treaties, in which the latter Oyapok alone is thus expressly designated; and concludes that the natural as well as the intentional boundary of the treaty of Utrecht, with respect to the French and Portuguese territories in this quarter, is the river Amazon. 'I leave it,' says he, ' to politicians to calculate what France has lost by the continuation of such an error; I will only observe that the interior of Guiana is in many respects one of the most interesting spots of all America.' The French government seems since to have thought the same, or perhaps thought the same beforehand, and merely communicated its ideas through the medium of the present memoir. The disputed line of coast is well illustrated by a chart.

'III. Historic Essay on ancient and modern Navigations

into high Northern Latitudes. By M. Bougainville.'

Of what length this essay is to consist, when concluded, we know not, for at present we are favoured with the first part alone; the object of which is to prove, first, that geography is a science altogether modern; and, secondly, that of all the voyages hitherto attempted or actually accomplished in these high latitudes, not one has proposed to itself a mere arrival at the north pole—the inducement having been either to find out a more expeditious course from Europe to the East-Indies, or to extend the lucrative traffic of whale-fisheries. It is to the immediate region of the north pole that our author wishes to direct the public attention, as a spot likely, if once attained and investigated, to be productive of infinite advantage to a variety of the most important sciences pursued by the mind of man.

To the navigation of the ancients M. Bougainville appears to give too slender a degree of commendation, excepting in the instance of the very questionable voyages of Pytheas, the whole of whose statements are supposed, in opposition to his own countryman, M. Gosselin, to have been founded on personal observation. With the more extensive and intrepid voyages of modern circumnavigators he is better acquainted; and among these the English, and especially the unfortunate Cook, come in for a due share of eulogy.

We have often had occasion to animadvert on the illiberal

conduct of the Hudson's Bay Company, who have not only, in many instances, impeded every attempt at obtaining additional information in their own quarter, but, like the Carthaginians of old, have been suspected, at times, of garbling facts themselves, and of purposely propagating gross misintelligence with respect to the course of different bays and rivers in their vicinity, in order to destroy all competition in their own gains. We are sorry to perceive the same observation advanced in the memoir before us, and in a manner that too fully confirms the truth of the rumors so repeatedly communicated to us on this head. The reading of M. Bougainville extends no later than to the voyages of captain Cook and his associates on the one side of the pole, and the expeditions of Pickersgill and Young on the other; and he has still doubts, therefore, of the existence of the passage which has been so frequently attempted, notwithstanding the confidence with which its existence is conjectured by the two latter in their statement communicated to the Royal Society. Had he been acquainted with the voyages of Vancouver, and especially of Mackenzie, of which latter some account will be found in our number for June last, these doubts would no longer have existed; since, although no continuous sea has yet been detected, the communication of immense rivers, whose course and conjunction are there clearly laid down, affords a complete inland navigation, and gives at least something of the passage which has been so long inquired after.

Here the limits of a periodical analysis compel us to rest. We shall resume the subject in our next Appendix; but must now hasten to vol. III of the class of Literature and Polite Arts.

The historical division commences with a notice of memoirs, either not printed or published separately, by M. Villar, secretary. Among these, the two which principally strike our attention are, Observations on a Greek Manuscript, containing a Work on the Chemistry of the Ancients, erroneously attributed to Democritus of Abdera; and an Essay, by Professor Ancillon of Berlin, on Psalm lxviii; proposing, as the report avers, an interpretation more natural, more intelligible, and more satisfactory, than any which has yet appeared. MM. Ameilhon and Langles are appointed commissaries for the examination of this work; and the account closes with the following observation:—

'We doubt not that every man of learning will unite his wishes to receive from M. Ancillon a similar labour, if not of the Psalms at large, at least of those which have most need of illustration.' So much for the return of biblical criticism.

The biographies follow. They consist of three: and of these we are sorry to find that the first announces the death, and gives us, in consequence, a notice of the life and labours, of Charles Dewailly. Of the literary powers of this celebrated

character our readers may form some judgement for themselves, by referring to the history of the Institute, as progressively given in several of our anterior numbers. The notice or éloge here introduced is from the pen of his friend M. Andrieux, secretary to the class, and, though brief and simple, does equal credit to his taste and feelings. Charles Dewailly was born at Paris, Nov. 9, 1729: he was educated by one of his uncles, and from his earliest infancy discovered an unconquerable partiality for the study and practice of architecture, in which he afterwards became so admirable a proficient. His chief master was Lejay, who at this period had just established a new school of the profession, and recovered it from the contempt in which it had been held from the age of Lewis XIV. In the year 1752 Dewailly obtained the chief architectural prize, and herewith a right of studying at Rome for three years, at the expense of the nation. Upon this success, his biographer notices an action so truly generous and laudable in the mind of an emulous young man, that we ought not to omit it. The student to whom the second prize was decreed, and whose name was Moreau, appeared extremely sorrowful. Dewailly interrogated him upon the subject of his chagrin; and learning that it proceeded from his having lost the opportunity of prosecuting his profession in Italy, he flew to the president of the architectural committee, and earnestly solicited permission that his unfortunate rival might be allowed to travel to Rome as well as himself. objection being adduced from the established rules- Well, well,' replied he, ' I yet know a mode of reconciling every thing. I am myself allotted three years; of these I can dispose as I like—I give eighteen months of them to Moreau.' This generous sacrifice was accepted; and Dewailly received an additional prize in the public esteem which accompanied so distinguished a transaction. In most of the modern buildings of taste and magnificence in his own country, Dewailly was a party employed. Many of his designs are engraven in the Encyclopédie and in Laborde's Description of France. He was a member of the Academy of Painting, as well as that of Architecture; in the latter of which he was at once admitted into the higher class, without having, as is customary, passed through the inferior. Of the National Institute he was a member from its establishment. He died on Brumaire 12, year VII, having been spared the affliction of beholding one of his most exquisite pieces of workmanship, the magnificent hall of the Odeon, destroyed by fire—a catastrophe which occurred but a short time after his demise.

A notice on the life and labours of Etienne-Louis Boullée, by M. Villar, follows. Boullée, like Dewailly, was an architect of great merit and celebrity. Born at Paris nearly in the same year (1728), he had the advantage of the same tuition, for

for Lejay was also his master. The public buildings he designed are numerous, and highly valued; and, among other proofs of his taste, we ought not to omit his very admirable monument to the memory of our own countryman, sir Isaac Newton. The plan is a mausoleum placed on the centre of a sphere: immensity surrounds it; and the genius of the philosopher seems still to hover through his own empire. Boullée died, Pluviose 17, year VII, chiefly of the infirmities of age, bequeathing his works, and a valuable MS. entitled 'Essay on

Art,' to the national library.

The last biography is by the same author, and consists of a notice on the life and works of Jean Dusaulx.—Dusaulx was born at Chartres, Nov. 28, 1728; and his father was a magistrate of singular virtue and integrity. The son commenced the world as commissary in the gendarmerie; in which capacity he married a lady, who has survived him, and to whom he appears to have been attached with a fidelity and unremitted affection beyond what are exhibited by his countrymen in general. He declared, towards the close of his life, that she had been his first and his last love; and it was to her he was indebted for nearly the whole of his literary reputation. Madame Dusaulx, from the casual effusions of his pen, conceived him to be capable of spirited as well as elegant versification, and proposed to him to translate particular passages of Juvenal. These he executed with so much success, that he was incited by degrees to make a complete version of the whole of his satires, and thereby produced a performance which secured to him a very large acquaintance and friendship with the literary world. He became successively a member of the Academy of Belles Lettres, of the Legislative Assembly, and of the National Convention. The intrepid honesty with which he delivered his sentiments—sentiments uniformly in favour of peace and humanity—exposed him to no small severity of suffering during the turbulence of the revolution, and disrobed him of the greater part of his property. He died, Ventose 26, year VII, at the age of 61. Independently of his justly-admired version of Juvenal, he wrote several other works; particularly one, which excited much attention, entitled On the Passion of Gaming, from the Times of the Ancients to our own Days.' His biographer adds, that he left behind him a reputation untinctured with a blot.

The prize questions proposed by the present class do not appear to have excited much interest in the nation: several of them have been addressed a second time, and even in a varied form, and still remain unanswered: the latter are now, therefore, withdrawn altogether. The republic appears, like every other nation indeed, to possess more rhymesters than poets. The subject of Liberty, proposed as a poetic prize in the year VI, has produced not less than twenty-five attempts, in the forms

App. Vol. 35. 2 M

of odes, poems, and epistles in verse. Of these, three only are reported to be worthy of any degree of attention, and not one entitled to the prize announced. The questions- What are the means of exciting among ourselves a new activity in the study of the Greek and Latin languages?' and 'What were the causes of the perfection of ancient sculpture, and what may be the means of re-acquiring such perfection?' have been more fortunate. M. Veau de Launy, professor of natural history in the central school of the department of Indre-et-Loire, at Tours, has obtained the prize in the former instance, and M. Emeric David in the latter. The class seems tired of proposing prize questions, which have provoked so little emulation among its countrymen; while, therefore, several are withdrawn, we have no addition of new ones. The names of the artists follow, who, in the judgement of the Institute, have deserved the prizes of painting, sculpture, and architecture for These appear to be all pupils of respectable mathe year VI. sters. The three who have obtained the capital prize under each of the above heads are to be sent to Italy, to prosecute their studies at the national expense.

We have next a notice on the books and writings presented to the class. They consist of about a hundred articles, almost all of them in modern French. Of the few foreign books presented, the most valuable by far is a copy of Wakefield's edition of Lucretius, in three volumes quarto. Of the vernacular publications, the most splendid in the catalogue are Didot's

editions of Malherbe and Virgil, both in superb folio.

We proceed to the Memoirs—of which the first is a report (compte rendu) by M. Camus, of the works undertaken by the National Institute, or executed under its direction. The labours to which the Institute is called are unbounded; for, independently of those which relate more immediately to itself as a body, the government seems to have demanded from it a sort of general superintendence over the universality of arts and sciences. It is to this demand of the French government that M. Camus directs his attention in the memoir before us. The first order of labours to which its notice is thus officially pointed, is a collection of the historians of France, a collection of charters and diplomas, and of ordonnances—some advance toward the whole of which we have remarked in a prior number. We have now to add, from the paper before us, that each of these truly valuable objects is proceeding with a rapid step. The Institute has obtained from the government a sufficiency of funds to assist the undertaking. In a few months from the date of the report, and consequently anterior to the present period, we are told that a volume of the collection of the historians of France, prepared by the joint labours of MM.

Briac and Drulhon, will be in a state fit for delivery to the press; and that a volume of charters and diplomas is preparing in the mean time, under the superintendence of M. du Theil.

The projected collection of the historians of the croisades, of which also we gave some intimation in the same article—that is to say, of monuments of the history of Europe, and of the East, from the termination of the eleventh to the beginning of the fourteenth century—is in a state of advance, and occupies the next notice of M. Camus. It is to be drawn up equally from Greek, Latin, and oriental writers; from documents of the invaders and invaded; as, from such a comparison alone, the positive truth can be deduced. Independently of these earlier labours, an express law of Germinal 15, year IV, obliges the institute to continue the Description of Arts begun by the Academy of Sciences, and the Extract of Manuscripts from the national libraries, commenced by the Academy of Inscriptions and Belles Lettres. In the public sitting of the preceding Messidor, the programma for the continuation of the latter was published: it has not however made its appearance among the papers of the National Institute appertaining to the present or any other class. A great number of notices, we are told, were even then prepared; that the directory had issued orders for their imprinting; and that the publication of the first volume (constituting the fifth of the entire collection) is now in a state of great forwardness.

The programma of the continuation of the Description of Arts is appended to the present memoir; and it points out very explicitly, under eight distinct heads, the mode by which those artists and men of letters who may be disposed to contribute toward this very laudable and national publication may best promote the general object in view. The intention is to compose one enormous whole, in a duly digested form, of all the arts now cultivated in the known world; to exemplify the relations and harmonies of theory and practice, of elements and combinations, of the speculator and the artist, and hence to ascertain what is deficient in either, and to advance the general sum of human science and of human happiness. Two alphabetic tables are subjoined—the first pointing out what arts have been already described by the old Academy of Sciences and the second, those which yet remain to be detailed in the National Institute. The memoir closes in the following terms.

In other times, among other nations, under other governments, sciences and arts have waited for peace in order to flourish; but, when the public agitation has for its object to conquer liberty, this very elevation of soul, which excites us to flee from slavery, to abhor dependence, excites us with an equal ardor toward the sciences and the arts. The free, the sagacious

Minerva, the protecting deity of Athens, introduced the Muses amidst the companions of Mars. Those divinities marched in conjunction;—in conjunction they still braid the wreath of republican soldiers: at the sound of the name of their chief, they intertwine the double title of favourite of the sciences and conqueror of tyrants. The people exult in this happy concert, and celebrate in their solemnities the triumph of corruscations, which produce liberty, and the triumph of liberty, which relumines the torch of sciences and arts.'

The object of this memoir is good, and we wish success to it; but its language is far from being strictly logical or correct. In the passage we have now quoted—and similar examples might be added—liberty is stated first to be conquered, and shortly afterward to triumph; and each is supposed to afford to the French people an equal cause of exultation! We will not enter into a discussion whether the former or the latter proposition be chiefly realised; we only wish that the latter were true to a greater extent than, we are fearful, it will be soberly allowed by any party.

(To be continued.)

ART. II.—L'Univers; Poème en Prose, en douze Chants: suivi de Notes et d'Observations sur le Système de Newton et la Théorie physique de la Terre. Orné de Figures d'après Raphael, Le Poussin, Fuesly, Le Barbier; avec Vignettes d'après Monnet et Lejeune. Paris. 1801.

The Universe; a Poem in Prose, in twelve Books: to which are subjoined Notes and Observations on the Newtonian System, and the natural Theory of the Earth. Embellished with Plates, &c. Imported by De Bosse.

'MY design' (says our author in his preface) 'has been to paint the universe, considered under its four grand points of view—natural, moral, political, and religious; and, consequently, to develop the four principal systems relative to each of these divisions; and linked together by the general system of the opposition of good and evil, on which the action of the

poem depends.

In delineating the universe in a natural point of view, I have described the chief phænomena of nature, and entered into a variety of details concerning them whenever occasion has offered. With respect to morals, the precepts of Confucius and of Christ have served me for a basis. On the subject of politics, I have freely delivered my own sentiments; and having but lately possessed a sufficient degree of liberty for this purpose, I have been obliged till now to postpone the publication of this work. On the point of religion, to avoid the two

rocks of atheism and superstition, I have adopted theism, as the belief most general, most useful, and most poetical. I have admitted a hierarchy of beings superior to ourselves, from the Supreme Intelligence, whom I have denominated God, Eternal, Omnipotent, Creator, Being of Beings,—to those intelligences who preside over different parts of the universe, and the earth. Thus, after the Eternal, I have supposed the existence of a secondary being, whom I call Nature, and who is particularly occupied with the earth and its inhabitants. I have supposed the existence of a being who directs the day-star, and whom I have alternately denominated Sun, Star, God of Day, or Genius of Fire:—of an intelligence who sways the waters, and who is, in like manner, alternately, Amphitrite, the Divinity of the Waters, the Sovereign of the Seas. I place in opposition to the Eternal, or Genius of Good, the Supreme Intelligence, and all the inferior Genii who assist him—the Genius of Evil or of Destruction, and his hateful retinue. Without this opinion of theism, without this conception of an order of intelligences, the poem could not have existed.'

Such is a part of the author's introduction, and such his machinery. He boasts considerably of his reading; and he has certainly brought together most of the shreds and absurdities of the old cosmologic systems. We have the ideal beauty, the soul of the world, and indestructibility of the material system of Plato; the atomic philosophy, the dissolution of substances into their primitive elements, and their recombination into other forms, of Democritus, Epicurus, and Lucretius; and the existence of two coëternal principles of good and evil, of Zoroaster and the Manichæans. And whatever antagonism or opposition of theory may subsist, and radically and essentially does subsist, between these various hypotheses, - without troubling himself upon this subject, or being very solicitous with respect to order and congruity, -our author (for the first time, we will venture to affirm, since their birth) has brought them all together, and boldly attempted an alliance between There is no necessity for the date of this publication, to inform us it was printed prior to the current year: for such is the mutation of sentiment, or at least of profession, that the expression Confucius and Christ would have been Christ and Confucius, had it been published within the last two or three months; or rather, perhaps, the name of Confucius would have been entirely suppressed from the prevailing fashion for Christianity. For the same reason, the author's theory would not have been that of simple theism; nor would he have conceived either that this constituted the most predominant creed among his countrymen, or that Christianity and superstition were synonymous terms.

Quidlibet audendi semper fuit æqua potestas.'

Such—and surely never was it better applied—is the author's motto. Leaving therefore all his incongruities and absurdities to himself, and admitting his right, as a poet, to the possession of them from time immemorial, let us follow him to their application in the twelve books of which this poem consists.

The first opens with a rhapsodic address to the Deity, the soul of the world, the creator of the universe. Not satisfied with this apostrophe, the poet next addresses his own imagination; and, lastly, the following female power; but whether a mother, a sister, a wife, or a mistress, is an ænigma which we shall not stay to resolve.

tender faithful friend! receive the homage of my song! To whom but to thee should I dedicate it? Thou, after the Eternal, art the being who chiefly presents itself to my soul, and who approaches most nearly to his image! Beneficent angel! thou disrobedst thyself of thy divine ornaments, thou assumedst a human figure, to accompany and sustain me in the toilsome path of life; but thy celestial origin pierced through this perishable investiture. Why hast thou abandoned me ere I had reached my allotted grave? Why, expanding thy luminous wings, hast thou so soon resumed thy flight towards the mansions of heaven?

We are now abruptly introduced into the temple or palace of the Almighty—the soul and mover of the universe: it is fixed in the centre of existence, and is delineated in more brilliant words than ideas. He is surrounded with an infinite variety of good and benevolent Genii; but what rights the Genius of Ennui has to a place among them—the author not having presented us with any abstract of his title from the herald's archives—we cannot undertake to determine. The Eternal addresses them upon the extent of his power and benevolence, and the infinite variety of beauties and beatitudes to which he has made it subservient; and particularly respecting the nature of man, the purity of the human soul, and the evils it encounters from its union with matter. During this address, the Genius of Order arrives in extreme haste, to announce that the Dæmon of Evil had broken from the place of confinement allotted to him, had taken arms against the Almighty, and that the universe was in danger.

Book II delineates the palace or temple of the Malignant Dæmon, which is situated in central darkness, surrounded by Chaos, Annihilation, Death, War, Pestilence, Famine, De-

spair, and a variety of similar powers that constitute his tremendous retinue: and we are here informed, that from a spirit of envy alone he is instigated to assault the Omnipotent and his creation.—In Book III we are told that the insurrection of the Genius of Evil against the universe having been in vain, and himself disgracefully defeated, he is determined to revenge himself by an assault on the race of man-the favourite offspring of his antagonist. With this view he ascends with a rapid wing to the temple of the Sun, whose vanity he inflames by addressing him as the sole author of all the beneficence and beautiful varieties exhibited on the earth; and stimulates him to oppose the Almighty, who is perpetually boasting of them as his own production. The palace of the Sun is described at large; but why the Aurora Borealis should be represented as contributing so considerably to the wonderful magic of the solar sanctuary, we know not. The Sun, however, is easily persuaded to take arms in vindication of his own affronted dignity; he pours down his heat with ten-fold intensity upon sea and land; and vegetables and animals of every class are destroyed almost to utter extinction. The Siroco, and, from the rarefaction of the atmosphere, every other wind, are set at liberty, and unite in the general desolation; while earthquakes, volcanoes, and tornadoes, duplicate the tremendous uproar. With the declining Sun, however, all is peace, and Nature smiles To complete the catastrophe, therefore, the Malignant Dæmon, in Book IV, sends the nymph Seduction, attended by her perpetual companion Imagination, to the Divinity of the Waters, with the same address and request he had just before presented to the God of Day. This latter power is now declared to be supreme, and his vanity is excited by the rivalry of other The residence of the Divinity of the Waters is fixed amidst the immense lakes of America: he attends to the address of the captivating heralds, and consents, with as much readiness as the Sun, to assert his supremacy. A universal deluge is the consequence; and the race of man, as well as of every other animal, would have been totally extinct, but for the superior genius of the primitive navigator, who 'whether' (says our author) 'protected by the Gods, or instructed by Nature, whose laws he had studied, had observed the numerous presages of the subversion of the globe, and had occupied himself with the best means of counteracting its effects.' We have now the construction of the Mosaic ark, to which system, at last, our author is compelled very largely to have recourse; and, in a manner much less natural than that of the Hebrew historian, he accounts for the introduction into it of animals of every The ark floats triumphantly on the world of foam, to which the ocean is converted; and, except the inhabitants of its capacious womb, every living creature is inundated and

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destroyed. Having represented the universe, the earth, and the elementary atoms, the primordia rerum of which it consists, as actual existences,—into which last all compound bodies are resolved, and which themselves can never be annihilated,—we were not a little surprised to find our poet asserting, in this book, that it is Imagination alone 'who has created the centre of centres of the celestial system, the lever which supports the earth, the pre-existent germs, the monads of which all beings are composed, the vortices in which the different planets perform their revolutions, and the powers which sustain them.' Our own imagination, we confess, is not competent to reconcile ideas so incongruous and opposite as are here presented; nor to conceive how that which is imaginary alone can have any

actual, much less any necessarily eternal, existence.

The reader may perhaps wonder in what manner an all-powerful and benevolent being could suffer such universal devastation and misery to take place. In Book V our poet endeavours to account for this circumstance, by relating that the Dæmon of Evil, after having engaged the divinities of Fire and Water to espouse his cause, hastened to the fantastic palace of Chance, whom he next, in like manner, persuades that all things are the work of his capricious will, and excites to fly towards the temple of the Eternal, and boldly to claim the homage due to his own supremacy of power. The Eternal hears him 'calmly as a warrior menaced by an impotent rival; and, in his reply, observes, that the Genius of Chance, so far from being able to create the universe, is not competent even to make a copy of any part of it, and can form no conjecture of the laws by which it is governed. Chance, in vindication of his power, attempts to imitate several distinct portions of the universe; but all is outrage and disorder: he can seldom advance beyond the existence of chaos; and, when he does, every thing he engenders is so hideous, incoherent, and monstrous, that he is ashamed of his exertions; 'he is frightened at the creation he has produced; flies from the Eternal with speed; and leaves him the trouble of replunging into annihilation the fruits of his ridiculous attempts.' We can have no objection to the contrast which is here drawn between the wise and benevolent operations of the Eternal Intelligence, and the absurd attempts and final confusion of the fantastic Genius of Chance; but it does not tell much in favour either of the genius of our poet, or the necessary omniscience and omnipotence of the being whose praises he pretends to celebrate, to intimate that he was so much occupied with this extraordiary parley between himself and the power of Chance, that he either did not know or could not prevent the ruin which the Malignant Dæmon was in the mean while heaping upon earth and his favourite race of man: yet this is the reason assigned why the Dæmon of Evil was able

thus far to accomplish his diabolic purposes of devastation without any opposition or impediment. In Book VI, however, the Supreme Intelligence interferes, supplicated by Nature, who appears before him in melancholy mood; he represses the insurrection of the apostate powers, limits the influence both of the divinities of Fire and Water, and elicits, from the disorder introduced, additional varieties of beauty, as well in the subterraneous as the superficial parts of the globe. Book VII delineates the existence of the golden age—an epoch of universal happiness and harmony,—with occasional contrasts between it and the miseries of the late war. In Book VIII, our poet, mounted on the wings of Imagination, again descends into the infernal regions; beholds the palace of Death, the divinity of Annihilation, surrounded by the powers of Despair, Remorse, Repentance, Ignorance, Credulity, and many other monsters and furies injurious to the joys of life, who in different ways are perpetually punishing the unhappy victims who are dragged by Death from existence, and placed beneath their several jurisdictions. Here also many of the miseries of the French revolution are prospectively unfolded. The Genius of Evil arrives, and upbraids Death for not having assisted him in the destruction of mankind with all the powers of which he is possessed; and shortly quits the infernal cave in haste, resolved to seek revenge from himself: he visits the earth, and lets loose among mankind the various passions and sensations of Ennui, Envy, Disgust, Inconstancy, Idleness, Love, and all the busy tribe of insatiable desires. Book IX, in a sort of parody upon the history of Cain and Abel,—for our author, with all his contempt for revealed religion, is obliged to draw largely from this fountain, -gives us his new and improved account of the origin of moral evil. Tubal and Adul are brothers, each of them married, and possessed of all domestic felicity can bestow in the persons of Selima and Zulma. The strongest and purest affection at first subsists between the brothers themselves; and Tubal rejoices as largely in the domestic and unembittered bliss of Adul as in his own: but, stimulated by the Genius of Destruction, he himself at length conceives an impure desire for the beautiful Zulma: this he long represses; but at length, urged on by madness and despair, he kills his brother, and commits a rape on Zulma his sister-in-law. Book X pursues the same subject. The incestuous murderer flies from the scene of his crimes into the desert, the perpetual prey of the severest anguish and remorse. The tender and virtuous Selima does not desert him; she accompanies him with her children, and, by her assiduous kindness and entreaties, at length assuages the misery of his mind, and restores him to tranquillity. But, torn as his bosom had been by contending

and violent passions, the pure and perpetual calm of Nature can please him no longer; day after day wears the same unvarying appearance; and he pants for a constant change of scenery, an uninterrupted series of occupation. Nature applies in his behalf to the throne of the Eternal, who, acceding to his wishes, changes the direction of the poles, and introduces the succession of seasons; hereby furnishing him with unceasing employment, and compelling him to support himself and family by the sweat of his brow. Tubal avails himself of the assistance of his children; he cultivates the ground; in doing which, he accidentally discovers a piece of metal that had been fused by some prior volcano, and thrown down from the mountains: and the invention of metallic instruments is dated from this epoch. Disgust and her retinue are in consequence driven back to hell, chased from earth by Labour and Industry. The Genius of Destruction resolves to exert himself again: and now, in Book XI, a new family of passions are armed to destroy the recommencing happiness of unfortunate man. These consist of Pleasure, War, Prejudice, Vengeance, Pride, Selfishness, Superstition, Fanaticism, Atheism, Luxury, Avarice, the Thirst of Glory, which are all marshaled in dreadful array, and sent forth to exert their various powers among the human race, and to render them as wretched as possible. Filled with the dreadful prospect of utter destruction, Nature again, in Book XII, applies to the throne of the Eternal, and represents the new calamities with which mankind are menaced. The Omnipotent calms her inquietudes, by assuring her that, in every instance, his antagonists shall operate an effect in complete opposition to what they intend; for that he has pre-ordained it, that good shall be perpetually the offspring of evil. To assist his views and intentions, and more completely defeat the purposes of the Dæmon of Destruction, he sends forth, at the same time, a different family from his celestial temple, capable of arming mankind against all the miseries they may be called upon to These consist of Wisdom, Hope, Indifference, (l'heureuse Insouciance) here strangely misnominated the daughter of Courage and Resignation, Forgetfulness of Evils, Joy, Illusion (aimable Illusion), Benevolence, Reason (the Mother of Justice and Truth), Religion, and several others.

Such is the outline of the present poem, in which the writer has assuredly displayed more fancy than fact, more imagination than judgement. His language, however, is brilliant, and his ideas, in many instances, happily conveyed. We wish he had postponed his publication till the present, instead of the past year; he would not then have been so much ashamed, as he appears to have been, of avowing the truth of revealed religion: his poem, perhaps, on the contrary, would have been con-

fessedly built upon its basis. It must be acknowledged, nevertheless, that he never offends us by ridiculing or satirising religion of any kind; that his morality is perfectly pure; and that he has offered every thing which lies in his own way to reconcile man to the evils of life, and fill him with pious resignation and heavenly hope. We have seldom seen the doctrine of a future, and indeed a separate state, so strenuously contended for by an avowed theist. The name of the poet we know not: he appears to have been an intimate friend of Demoustier, who was the author of several fugitive but elegant pieces of poetry, and who hereby acquired no small degree of celebrity: - of these, The Conciliator, or Amiable Man; Filial Love; and the Gallantry of the Eighteenth Century, have been generally regarded as his best. The notes appended by our author are of no great importance: but we shall add the following extract, as a specimen of his style, with which our article must conclude.

Sweet Religion, the daughter of Hope, opens to the eyes of man his splendid destination; she fills his spirit with her precious promises. He beholds himself attended by a protector, who defends him in the midst of his perils: he perceives that the shades of those he loved still hover around him-shades that give plaudits to his good actions, and that murmur when he listens to the voice of passions or of crimes: she it is who supports him, when tottering and surrounded with precipices, in the midmost darkness of ignorance and error: she it is who comforts the unfortunate man abandoned by all besides, and expiring on a bed of anguish. When the agents of Destruction load this king of created beings with fetters, and trample upon him in the dust, she breaks his chains; her sublime inspirations elevate him to the Eternal. She exclaims to the insensate wretch, who, hardening himself in his career of crime, asserts 'the Eternal exists not—there is no Eternity'— ' Monster of pride and imperfections! thou abasest the Divinity to thyself, in order to elevate thyself to him! Thou imprisonest him in the narrow circle of thy own thoughts, and thinkest that with him thou hereby enfoldest immensity! Thou makest matter thine idol: and yet what means hast thou of assuring thyself that it exists independently of thy own sensations, that the universe is not a mere perception of thy own soul, as it is one of the ideas of the Eternal? Thou sayest to thyself "What occasion have I to fatigue my imagination by the idea of a God who humiliates my pride? Matter alone has inherent powers adequate to its own movements; let us banish this being to the infant brood of fancy."-No; thou canst not annihilate this superior being; the proofs of his existence are written in letters of fire over the vault of the firmament, in

whose circumference thy spirit is bewildered. What! can man, then, be a marvelous combination of matter guided by intelligence, while the universe, in which he is but an atom, is a production guided alone by Chance?—The idea of the immortality of thy soul, of the existence of a being superior to thyself—is it then too vast, too sublime? Art thou incapable of sustaining the weight of the word ETERNITY? This immortality, is it then more wonderful than the faculty of thinking which thou attributest to matter? Can thy imagination conceive no world peopled with beings superior to thyself? Can it not, elevating itself with a daring flight beyond the circle of beings more intelligent and more perfect still, reach at length the sovereign of such intelligences—the Omnipotent?

ART. III.—Mémoires sur l'Egypte, &c. Paris. 1801.

Memoirs on Egypt, published during the Years VII, VIII, and IX.— Vol. II. 8vo. Imported by De Boffe.

WE reviewed the first volume of this collection in the English translation *; but the many meagre unsatisfactory articles found in it disgusted us, and, we suspect, rendered its reception in this country so cool, as to prevent any attempt to give the subsequent volumes an English dress. Perhaps we expected too much; or the eager haste of our more volatile neighbours, to offer some account of their new conquest, led them to publish before they had attained materials of importance, or properly matured their observations. The second volume is more appropriate to the scene whence the memoirs are derived; and some of the astronomic and geographic observations are peculiarly valuable.

The history of the institute, the first part of this volume, contains only the miscellaneous transactions of each session. We shall select some passages of interest and importance. In a communication from Bonaparte, it appears that in the city of Cairo, within 100 days, 1067 persons died, including mussulmen only.—The declination of the magnetic needle at Cairo is said to be 12½ degrees.—General Reynier sent two specimens of rock, separated from the hill Djebel-nabo, which extends, from east to west, as far as the environs of Belbeys. When examined, they appeared of very different kinds; one was a red calcareous stone, strongly effervescing; the other, a grit formed of particles of transparent quartz, united by a ferrugineous cement, slightly effervescing.—M. Dolomieu seems to have read an interesting memoir on the agriculture of Lower Egypt, which appears to be reported very imperfectly in the history: we trust

that in the future volumes—for two more are promised—we shall see it at length. Agriculture in Egypt seems to be loaded with heavy imposts; and the gains are diminished by the necessity of borrowing money at a high rate of interest. The Nile rises to a less elevation in Upper than in Lower Egypt; so that the cultivation of rice is confined to the latter. 'The ratio of the product of the seeds in the rice-grounds is from ten to twenty; six to ten for wheat; and for barley, ten to fifteen. The sugar-cane, indigo, and cotton, are more lucrative objects of cultivation: that of the date-tree is most so. In his voyages through Lower Egypt, he made many important observations on ancient and physical geography. He discovered the situation of the ancient Damietta, near the modern city. He visited the fine ruins situated near the city of Bagdad, three leagues from Semenhoud, where there are large masses of granite, charged with figures apparently emblematical, and of women presenting offerings to Osiris. In the ruins of Sebenite he has discovered vast architectural remains, which display its former magnificence. His examination of the site of Batis leads him to think that it is the same with the modern village of Batieh, on the lake Burlos; but he could find nothing that answered to its famous temple mentioned by Herodotus and Diodorus Siculus. Vast lakes and salt marshes have now covered what was once a fertile, well cultivated, and well inhabited country; which the author attributes to an increased height of the level of the sea.

An officer of engineers, in sinking the ditches of Gyzeh, found, at the depth of five feet, some remains of ancient buildings, which, he thinks, prove that the ground is raised at least in that part. M. Berthollet, in his accounts of the natron lakes, attributes the salt to the sea-salt, decomposed by carbonate of lime. We remember offering the same remark from our analysis of Egyptian natron, in which were some remains of common

salt and lime.

M. Geoffroy read a description of a new species of fish, which is called in Egypt bichio. It is of the genus esox: he adds to the trivial name the appellation of 'quadrupedes,' from the singular appearance of the anterior and posterior fins. M. Berthollet read some observations on the eudiometric action of alkaline sulphurs, and of phosphorus. Many of the labours of the institute appear to have no immediate relation to Egypt, and might with equal propriety and success have been made on the banks of the Neva, the Seine, or the Ganges. Except in the application, this memoir is equally extraneous. The author treats of the uncertainty of hydrogen and nitrous gas, as eudiometric proofs; and thinks alkaline sulphurs preferable. Phosphorus, however, is the best; and, as the quantity of azote remaining is a little increased by a solution of the phosphorus, if this be

allowed for, it is very correct. The quantity of oxygen in the

air at Cairo is 0.22, the same as at Paris.

A stone discovered by an officer of engineers at Rosetta has been much spoken of. We expect soon to receive a particular account of this curious remain; but shall perhaps gratify several readers by the short description of it, in a note to this part of the volume, by M. Marcel. We must premise that the stone is black, and divided into three horizontal bands: the lowest contains several lines in Greek characters, engraven in the reign, as was first supposed, of Ptolemy Philopator; the second inscription is in unknown characters, and the first in hieroglyphics. As it is probable that the meaning is the same, we may, hence, find some clue to this unknown, as well as to the hieroglyphic, language. What follows is from M. Marcel.

'The stone is about three feet high, twenty-seven inches wide, and six in thickness. The hieroglyphic inscription contains fourteen lines; the figures, which in dimension are about half an inch, are ranged from left to right. The second inscription, which was at first said to be Syriac, then Coptic, is composed of thirty-two lines, in the same direction with that of the first, and evidently consists of the running characters of the ancient Egyptian language. I have found the same characters on some rolls of papyrus, and on some bands of cloth which had surrounded mummies. The Greek inscription, which contains fifty-four lines, is particularly remarkable, as it contains many words that are not Greek; particularly Ftå God, which is Egyptian, and shows the æra when, in spite of the efforts of the Ptolemies, the indigenous language of Egypt began to mix with that of the Greeks, their conquerors. This mixture gradually increased till toward the fourth century of the Christian æra (ére vulgaire), when it became the ancient Coptic, of which we have some valuable remains in the modern Coptic.

'This stone was engraven about the 157th year before Christ, in the beginning of the reign of Ptolemy Philometor (not Philopator); for the name of the latter, who reigned about the year 195 before Christ, occurs with those of Philadelphus, Euergetes, and Epiphanes, in the enumeration of the Gods, or kings deified—the predecessors of the king whose coronation and inauguration is recorded in this monument. The details preserved on this stone are very interesting, as well as the ceremonies described: they will be the subject of a particular me-

moir.'

M. Geoffroy read the first part of a memoir, containing an anatomical and zoological description of a fish, called in Egypt fachbaca, which some naturalists have called the rayed tetrodon. After showing that two species are confounded under this title,

he describes the organs peculiar to the family of tetrodons; viz. the power of inflating the lower parts of their bodies. M. Geoffroy thinks that all the air which produces this effect is contained in the stomach, and that the air-bladder only opposes the evacuation of the air in shutting up the entrance of the cesophagus.

M. Monge read a memoir -

with partial differences, and to those of curved surfaces, considered relative to their generation; which have important relations, unknown to the inventors of the calculus of partial differences, and which supply resources to render this calculus more perfect. This elegant connexion satisfies the mind, by giving to our inquiries a more sensible object. It offers a new and more extensive field to geometry, and realises in some sort the

abstractions of analysis.

The curved surface, considered in the present memoir, is one whose normals are all tangents to the surface of the same sphere. It may be "engendered" by a spiral, unfolding from a circle, whose plane moves on any conic surface, without the centre of the unfolded circle quitting the summit of the cone. One of the lines of curvature of this surface is plain: it is the generator itself. The other line of curvature is spheric: the locus of the centres of the other curvatures is the cone. The surface has three remarkable lines; the first is a returning angle (arête de rebraussement), owing to the figure of the generatrix; the second is a similar angle, inherent in the generatrix; the third is the locus of all the points, where the two curvatures of the surface are equal.

'The first of these lines is in the surface of the sphere; the second on the surface of the cone; and the third has, for its unfolding, the intersection of the sphere and cone. These three lines have a common point, which is, for each, a point of return,

and, for the surface, a true summit.'

The author, after having deduced from the properties of the surface its equation in finite quantities, and its equation in partial differences, shows the method of passing from this second equation to the first; that is, of integrating the equation with partial differences. He here applies the method, whose principles he has explained in other places; and the surface considered in this memoir offers an interesting example of the general theory proposed to be established in the subsequent memoirs. We have consequently explained it more at large, and chiefly in the author's own words.

A memoir, it is said, has been communicated by M. de Lisle, in which many of Forskal's plants are compared with the Linnæan. We had occasion, some years since, to make this comparison, and found it a very difficult task; which we then attri-

buted to the cause assigned by the present author, viz. the errors which the youth of the naturalist of Arabia occasioned, and which his premature death prevented him from correcting. By a careful examination and comparison, the marrubium plicatum of Forskâl appears to be the M. alysson L.; the ysatis Ægyptiaca, and the Y. pennata of F., to be the bunias kakile L.; the conyza odora F.; the baccaris dioscoridis L.; the Stewartia corchoridis F., the sida spinosa L.; the ricinus medicus F., the R. communis L.

We remark particularly, in this history, the mention of a memoir of M. Balzac, containing an account of the ruins of the great circus, or hippodrome, where the column of Pompey is placed; as confirming in some measure the ingenious conjectures of Dr. White. An account of a machine invented by Conte is not less interesting: it is designed to measure very minute intervals, by the weight of mercury which escapes from a very small aperture: it is applied, also, to measure the inflammability of powder, and said to succeed more exactly than could have been expected. A memoir of M. Poussielgue, on the differences between the customs of the ancient Egyptians and their cotemporaries, will probably be interesting.

The Canopic branch of the Nile—the only one of the seven formerly described which has not been discovered by the moderns—is pointed out by M. Lancret. About a league from Rahmanieh, near the village of Cafr-mehallet Daoud, on the right of the canal of Alexandria, is found the western branch of the Nile. It is as large as that of Rosetta or Damietta, and is about a metre and a half deep. It serves, at present, only to conduct the superfluous waters into the lake of Behyreh, which has been employed in watering the adjoining fields. In the neighbourhood of the Nile, its course has been obliterated by

cultivation.

The only other communication of importance, which we shall extract from this history, relates to the nilometer of Megyas, in the island of Rouddah. This monument the author -M. le Père, engineer of bridges and high-ways-has examined with peculiar care and accuracy; and has measured the sixteen cubits marked on the pillar, as well as the comparative length of 540 millimeters, which exceeds only by three-tenths of a line in twenty inches. The first nilometer was constructed by the calif El Mamoun, the seventh prince of the house of Abassides, about the year 800 of our æra; but it was rebuilt by the tenth calif of that family, about 54 years afterwards. The Cufic inscriptions are only verses from the Alkoran, and contain no name, or any thing relating to a historic epoch. A more modern inscription is engraven on marble, and placed on the eastern side of the superior gallery. It imports, that, in the year 485 of the Hegira (A.D. 1035), the calif Mostanser, the seventh of the Fatimites, mounted the throne at the age of nine years, and died

in 1094. To render the inundation complete, the waters rise above the capital of the column; that is, to the height of at least twenty-three feet. The author adds various circumstances respecting the course of the Nile, the causes and duration of the inundation, with many other topics, which we shall be better able to follow when the memoir is before us. The want or obscurity of historical testimony prevents us from knowing with precision the changes that time has occasioned in Lower Egypt, the level of its waters, and of those of the adjoining sea. As a standard for future observers, the author points out the calcareous stone, which serves as the base of the great pyramid toward the summit of the north-eastern angle. plane is 130 feet 6 inches above the capital of the column.

We have followed this history more minutely than we had designed; but we have anticipated some of the subjects of the future volumes, and perhaps gratified the curiosity which more vague reports may have excited. We shall now pursue the

memoirs in their order.

' Analysis of the Waters of the Nile and some Salt Waters, by M. Regnault.'-To drink of the waters of the Nile was a luxury often spoken of by travelers; which we have usually considered as owing to their arriving at the river from the desert, where the arid soil refused the solace of any fluid. It appears, however, from this analysis, to be peculiarly pure, light, and agreeable to the taste. 122 hectograms of water (about 28 pints) yielded little more than 30 grains (21.74 decigrams) of residuum. Muriat of soda, carbonate of magnesia and of lime, were the chief ingredients, in the proportion of 4.77, 7.43, and 5.30 decigrams respectively. A decigram is

somewhat more than half a grain.

APP. Vol. 35.

Joseph's Well is situated in the citadel of Cairo, dug through a rock, and divided by a platform into two unequal parts. The depth of the whole well is 267 feet. A large rectangular aperture leaves a passage for the light to the platform which separates the two wells. We there find, in a hollow, a hydraulic machine, moved by oxen, which raises the water from the lower well to a reservoir, whence it is brought by another machine to the top of the upper well. The descent to each well is by a ladder formed in the rock; and the steps of the lower ladder are more narrow and dark than those of the upper. water of the well experiences the same increase and diminution with that of the river; so that the level of the well is probably below that of the Nile. The water, however, is brackish, from the salts collected during its infiltration. At the time of the inundation, the saltness is increased, as the water penetrates into the well by a greater number of passages. The analysis therefore points out the nature, not the quantity, of the salts, since that is variable: it was made previous to the inundation, so that the 2 N

quantity is less than at any other time. Réaumur's thermometer, at the top of the upper well, was at 19°; at the platform, 17°; and at the bottom, 15°. In 49 kilograms were 2.12 grams of carbonic acid; and in 1200 grams there were 58.3 decigrams. The largest proportion of the remains was common salt, with about one third of that quantity of sulphat of soda.

On the banks of the Red Sea, on the Arabian side, is a mountain known by the name of Djebel Hhammam Pharaon, or the Mountain of the Baths of Pharaoh. We knew, however, that Pharaoh was a title, not an appellative; so that this name by no means fixes the æra of their construction. At the foot of this mountain is a grotto with two entrances. One reaches, by a straight and low passage, to the source of the hot waters, which run into the sea, without losing any of their heat, passing through a rock and banks of sand. The heat is so great, that the hand can neither bear the waters, nor the rock through which they pass; and in entering the passage, the temperature is perceived to be very considerable, increasing as the inquirer proceeds, and proving at last almost suffocating. Many who have attempted to penetrate to the source have been killed by the heat and the carbonic acid vapour. These waters have been known from very early antiquity, and recommended for They are very bitter and salt, with a diseases of the skin. hepatic smell, from sulphurated hydrogen gas and carbonic acid gas. The muriat of soda is in a very large proportion, with about one third of the quantity of muriat of lime, and a small proportion of muriat of magnesia. There are some carbonates in a very inconsiderable proportion.

The castle of Adjeroud, through which pilgrims pass in their journey to Mecca, is situated in the desert, about four leagues from Suez. It contains a well of sulphureous water, of which men cannot drink, but which, in part, supplies the camels. It is a hepatised water, containing chiefly muriat of soda and of

lime.

In following the vestiges of the canal which leads to the Red Sea, at five leagues from Belbeis, is the village of Habaseh. It is situated at the extremity of a long valley—marked on D'Anville's chart as 'the lake whose water is bitter;' because, in the most considerable inundations of the Nile, it forms, in reality, a lake. This valley is cultivated, and contains many habitations, each of which has a well that waters the neighbouring fields. The water analysed comes from a well near the village. It is brackish, but still potable, containing a large

We find it impossible to convey an accurate idea of French weights to the English reader, and shall therefore not attempt it. Of all the follies of the late changes in that country, this is the most ridiculous and inconvenient.

ever, considerable.

The Fountain of Hatabeh is situated in Arabia, at a league from Moses's Fountain. The water, like the former, is drinkable, though brackish. Muriat of soda is its almost only ingredient of importance. There is also a little carbonate of lime.

We must defer the remainder of this volume till the publication of another Appendix, unless prevented by an English

translation.

(To be continued.)

ART. IV.—Lettre au Citoyen CHAPTAL, Ministre de l'Intérieur, Membre de l'Institut National des Sciences et Arts, &c. au Sujet de l'Inscription Egyptienne du Monument trouvé à Rosette. Par A. I. SILVESTRE DE SACY, ci-devant Associé de l'Académie des Inscriptions et Belles-Lettres, &c. Paris. 1802.

Letter to Citizen Chaptal, Minister of the Interior, Member of the National Institute of Sciences and Arts, respecting the Egyptian Inscription on a Monument found at Rosetta. By A. I. Silvester de Sacy, formerly Member of the Academy of Inscriptions and Belles-Lettres, &c.

IT is well known that, in the articles of capitulation between lord Hutchinson and general Ménou, the monumental remains of ancient Egypt which had been collected by the French, and were at that time in their possession, were conditioned to be delivered up to the conquerors. Among these, that which constitutes the subject of this letter is the principal, and in many respects of considerable value. On the discovery of it in clearing out a ditch near Rosetta (Raschid), M. Marcel, superintendant of the national printing-office at Cairo, by means of a rolling-press, having taken off different impressions, three of them were submitted to M. de Sacy, and, in consequence of being importuned for his explanation by the minister of the interior, the letter before us was written.

M. de Sacy begins with noticing the surprise expressed by M. Chaptal, that the hope he at first had conceived, if not of deciphering the whole Egyptian inscription, at least of reading so much of it as would enable him to ascertain the language in which it was written, should not have been realised by him. I myself, continues he, am astonished, when I conside: the number of words which I think I can read, and which offer the forms of above fifteen letters. It is true, he observes, that

these words, being but proper names, can throw no light on the language of the inscription; yet, by means of the letters they contain, it was natural to expect that, in proceeding from known to unknown, the reading of such words as most frequently recurred might be fixed; those, for instance, which corresponded to the Greek for God, king, son, &c. Thus, on finding, as there was ground to conjecture, the words nort, or φτ, πιοτρο, αικρι, of the Coptic, or modern Egyptian a language incontestably formed from the ruins of the ancientit might reasonably be expected the discovery would be pushed farther, and the general import, if not the whole, be recovered. Such, M. de Sacy confesses, were the hopes he entertained at the first sight- of the inscription, and which he too lightly expressed. On being, however, now called upon for the result of his labour, he frankly acknowledges that it amounts to but little, and which he would not himself have committed to paper, if it had not been exacted from him.

In describing the monument, he observes that it contains three inscriptions, or rather the same in three different characters. The first, in hieroglyphics, consists of fourteen lines; the last, in Greek, occupies fifty-four lines; and between these is a third of thirty-two lines, which he styles Egyptian, without however affirming that the character in which it is written

was ever universal in Egypt.

One part of the stone is broken off, and the top of it is greatly injured, so as to have lost, both on the right side and left, a considerable portion of the hieroglyphic inscription; of which indeed not a line remains complete, and above a third

part of the whole is gone.

Below, the monument is much less injured: of the Greek inscription, there are only the three last lines which have their beginnings effaced; but those few letters may be easily supplied. On the opposite side the stone has suffered much; and the fracture has carried away the terminations of many lines in the Greek inscription, whence many chasms have been produced. These chasms commence at the twenty-eighth line, and progressively increase to the fifty-fourth and last. The ends of the last lines want from thirty to thirty-five letters. Many of these may be easily restored; and, without doubt, the learned will avail themselves of every expedient to restore them.

The Egyptian inscription has been less injured than either of the others. A portion of the first fourteen lines is gone; but it is not very considerable. The loss, however, as it happens toward the beginning of them, is to be much regretted, and must create a considerable obstacle in deciphering.

The better to effect his object, M. de Sacy was furnished

with three copies of the monument, as we have already stated, and, in reading the Greek inscription, few difficulties occurred; but in the upper part of the Egyptian, toward the middle of the stone, his several copies presented a confused mixture of indeterminate strokes, which he was at a loss to decide whether it were occasioned by imperfection in the impression, or from

the injury which the stone had sustained.

Without entering into a discussion of the Greek, M. de Sacy confines himself to the citation only of such passages from it as are necessary more immediately to his purpose, premising that the three inscriptions are but one and the same in three languages, or rather in three different characters (for the hieroglyphic character, being the picture of images and not of sounds, belongs to no determinate language). That such is the import of this inscription is obvious, since toward the end of the Greek the following passage occurs ΣΤΕΡΕΟΥ ΛΙΘΟΎ ΤΟΙΣ ΤΕ ΙΕΡΟΙΣ ΚΑΙ ΕΓΧΩΡΙΟΙΣ ΚΑΙ ΕΛΛΗΝΙΚΟΙΣ ΓΡΑΜΜΑΣΙΝ; which, notwithstanding the chasm at the beginning of them, evidently express that the authors of the decree ordained it to be engraved on A HARD * STONE IN THREE CHARACTERS-THE SACRED [or hieroglyphic], LOCAL, AND GREEK. It is, however, judiciously observed, that great error would arise from considering either translation as the literal representative of the other two.

Upon this ground, indeed, M. de Sacy first proceeded, and, by the simple rule of proportion, endeavoured to find in the Egyptian inscription the proper names in the Greek, hoping by that mean to obtain the alphabet desired: but though the concurrence of ALEXANDER and ALEXANDRIA first seemed to justify the principle, the same degree of certainty did not follow

upon further attempts.

In respect to the name of Alexander-which occurs but once, and that in the fourth line of the Greek inscriptionthough M. de Sacy's rule of proportion led him to look for it in the third line of the Egyptian, and he found the characters which he apprehended to correspond in the close of the second line, yet it follows—not to our conviction—that he found the name he supposed: for, not to insist upon the circumstances remarked by him in respect to small letters and capitals, notwithstanding the name Alexandria, in the seventeenth line of the Greek, might point out its correspondent in the tenth of the Egyptian, it is not thence to be hastily concluded that a similarity of four characters in the two respective places will

^{*} M. de SACY's translation is here given; but the term ITEPEOT, we apprehend, here signifies erectible; and the words not ETHEAI or inaction that the parties not the second that the second that the second that the second th

dria—unless it can be shown that the city to which the Greeks gave the name Alexandria was so called by the natives of Egypt; and that it was not, we have Coptic authorities to evince. Hence, then, there is some ground to infer that, instead of having ascertained these two names, great doubt attaches to both.—This observation is not made in the spirit of

cavil, but only to intimate the propriety of caution.

With the letters obtained from these names, M. de Sacy proceeds in his investigation; and as, in the Egyptian inscription, the word Aftouolma, thus made out, occurs at least a dozen times in lines 2, 3, 4, 5, 21, 22, 24, 29, &c. he distinctly states his analysis of it, adding, to preclude any objection that might be offered from the name commencing with an A before II, that it is almost the universal practice with the Orientals, when they borrow from the Greek, or any other language, a word which begins with two consonants. Thus, in στοα, σχημα, στρογίυλος, the Syrians use [[(estouo), [(

Considering the alef as ascertained, the next attempt is made on the name of Arsinoë, in the 2d, 3d, 4th, 6th, and 24th lines; which being often preceded by that of Ptolemy, is obvious; since Ptolemy (Philopator) and Arsinoë are here mentioned as the father and mother of Ptolemy Epiphanes, in favour of whom the monument itself was erected. In analysing the characters of which this name is composed, and pointing out their similarity to the Phænician, Hebrew, and Arabic, it is stated to have been pronounced Arsinioua, and, accordingly, is

supposed to be so written.

M. de Sacy did not, at first, imagine that the word Epiphanes would occur in an Egyptian inscription; nor indeed, as being a TITLE, and not a name, can we be easily persuaded that it does. He however professes to have found it in lines 2, 3, 5, 21, 22, 24, 25, 29, 30, and 31, as immediately following, or being very near to the name of Ptolemy; but wherever the name of Ptolemy is followed by that of Arsinoë—and, consequently, Ptolemy Philopator is intended—it is never seen to occur. This is considered as a convincing proof that the term Epiphanes is ascertained. To obviate a difficulty that might bar this conclusion, it is observed that, as in the Hebrew, Syriac, &c.—which, having no letter corresponding to the Greek II, express indifferently that character and Φ by the same—the word ΕΠΙΦΑΝΗΣ must contain two similar letters; and the Hebrews

being obliged to write it D'IDDN, so likewise must it have been in the Egyptian. But granting the name of Ptolemy to be unequivocally ascertained, if the title Epiphanes were translated in the inscription, the corresponding epithet must occupy in the inscription the same relative spaces. If any stress then should be laid upon this remark, whatever ingenuity may be shown in investigating the characters alleged, it will be irrelevant, at least, to the case; but, this out of the question, it appears to us a hint of caution, lest, because one character may resemble a Phænician, another a Samaritan, a third an Arabic, a Hebrew, or Syriac, we conclude it must therefore be received as of the same value when we meet with it in

Egyptian.

Between the name of Ptolemy and the term Epiphanes, there occurs in various parts of the inscription, particularly in lines 2, 5, and 21, a word which M. de Sacy supposes to answer the Greek OEOS; but this he imagines to be a monogram, or abbreviation, rather than a term which expresses each letter at length. According to his adopted method of deciphering, the two first letters are supposed to exhibit the word onort, or, in Saidie, THOTE, which the modern Copts pronounce Abnoudi, or Abnouda, and which literally signifies God. This word, in the Memphitic dialect, is written in an abridged form; thus, \$\Psi\$. M. de Sacy conjectures that in the ancient language of Egypt the word might have terminated with an aspiration, whence the Greeks might take occasion to write Plas; and also that $\Phi\theta\alpha\varepsilon$, or $\Phi\theta\alpha$, was possibly no other than Abnouda, or Afnousa. This conjecture, he thinks, is countenanced by the Jewish practice of altering the pronunciation of names, and offers as an example the instance of Rambam, or Ramban, for Rabi Mosche ben-Maimoun, and Rabi Mosche ben-Nahman, because

they abbreviate these names thus: $\square 2 \square 1$ and $\square 2 \square 1$. It is however with great reluctance that we admit this expedient; nor indeed can we admit it, but with much additional evidence that the word in question is so to be explained. This very respectable writer is aware, according to Jablonski, supported by the evidence of antiquity, that the word $\theta \theta \alpha s$ is the name of a particular divinity, which the Greeks translated by the term $\theta \theta \alpha s$.—If now the term $\theta \theta \alpha s$ were itself Egyptian, why not seek it in the inscription itself, instead of giving Abnouda as the substitute? But it is alleged that the inscription appears to convict the Greeks of error, since it distinguishes $\theta \theta \alpha s$ from $\theta \alpha s$ from

ΚΑΘΑΠΕΡ Ο ΗΛΙΟΣ ΜΕΓΑΣ ΒΑΣΙΛΕΥΣ ΤΩΝ ΤΕ ΑΝΩ ΚΑΙ ΤΩΝ ΚΑΤΩ ΧΩΡΩΝ ΕΚΓΟΝΟΥ ΘΕΩΝ ΦΙΛΟΠΑΤΟΡΩΝ ΟΝ Ο ΗΦΑΙΣΤΟΣ ΕΔΟΚΙΜΑΣΕΝ Ω Ο ΗΛΙΟΣ ΕΔΩΚΕΝ ΤΗΝ ΝΙΚΗΝ. And as the name $\Phi\theta\alpha_{\mathcal{S}}$ is afterwards found—ΠΤΟΛΕ-ΜΑΙΟΥ ΑΙΩΝΟΒΙΟΥ ΗΓΑΠΗΜΕΝΟΥ ΥΠΟ ΤΟΥ $\Phi\Theta$ A—it is inferred that $H\varphi\alpha_{\mathcal{I}}\sigma\tau_{\mathcal{S}}$ and $\Phi\theta\alpha_{\mathcal{S}}$ should not be confounded. But admitting this, if $\Phi\theta\alpha$ or $\Phi\theta\alpha_{\mathcal{S}}$ be an Egyptian term, the

question recurs, Why substitute Abnouda for it?

The names of Isis and Osiris being found in the Greek inscription, lines 10 and 26, M. de Sacy looks for them also in the Egyptian, and, as he persuades himself, discovers them conjoined twice in the 6th line, once in the 12th, and, particularly Osiris, in lines 7, 10, 11, 20, 21, 29, and 30: that of Isis, he observes, occurs also several times, but without Osiris connected with it. The repetition of these names induces our author to believe, unless the illusion of fancy has misled him, that he has developed also the conjunction that joins them.

'I know not,' adds he, 'if I can communicate that kind of conviction which I feel, of having ascertained these two words; for I am conscious that it rests entirely on simple conjectures, and especially as the name which I have substituted for that of Osiris is attended with considerable difficulties: but having promised nothing but conjectures more or less probable, I shall freely state what I think I have found.'

Premising then that, for these names, he reads Isi out Osnik, the following observations are added upon them:

1. We certainly have here two proper names, each beginning with a capital.

' 2. The second letter of each name is a schin, the value of

which is known from the name of Arsinoë.

'3. In the Greek inscription, line 10, Isis is placed before Osiris—KAOAMEP Ω POS O THS ISIOS KAI OSIPIDOS TIOS; and the same reading occurs in line 26. It is natural therefore to find the same order in the Egyptian inscription.

'4. The form which I attribute to the capital jod may be justified to a certain point by the figure of that letter in the Samaritan alphabet, M, and on different Phœnician monuments, where it is formed by three inclined strokes: the jod, especially of Pococke's inscriptions, reversed, approaches very nearly to this. On an Asmonean medal, in the name of Mattathias, the jod is formed like a capital Z, which is precisely the shape of the jod in question.

5. The third letter of the word Isi may be the vowel i, or if there were a particular letter in this Egyptian alphabet to express the latter, as has been before observed on the word

Epiphanes.

6. The two letters that follow, not belonging to the name of Isis, must be considered as constituting the conjunction copulative, and frequently occur throughout the inscription. Of these the former is a vau, signifying and, and is the conjunction copulative of all the Oriental languages. No determinate value is annexed to the latter, as it never offers itself in any other of the words deciphered. But the Coptic language comes here to my aid; and as in it we use OTOS, according to the Memphitic dialect, to express the conjunction and, I consider this letter as nothing more than the aspirate haris. It is singular to find this pronunciation of the conjunction in the northern languages: thus we have og in the Danish and Islandic, och in the Swedish, and in the Gothic of Ulphilas the conjunction is jab.

7. That the capital letter which follows is an o or van, and performs the function of a vowel, as in the conjunction, will be readily admitted, if it be adverted to that its form is very analogous to the Samaritan 3, and the Phoenician van, on

different monuments.

'8. After the schin, which makes the second letter of the name Osiris, comes a letter whose value, from the name of Epiphanes, can be no other than a nun. Next occur two strokes, sometimes united, at others separate; as is evident from lines 29 and 30.'

If these strokes form but one letter, M. de Sacy professes himself ignorant of their import; but if they be two, the first he apprehends to be i or η , and the second the aspiration

o, as in the conjunction out.

As it may be a difficulty with others—and M. de Sacy confesses it to be one with himself—satisfactorily to identify the word which is to be pronounced Osnib or Osneb (or, if you will, Osinib or Osinib; or, in short, Osn ...; admitting the last letters to be unknown) with the name of Osiris, he frankly professes that there is but one expedient: this is, to admit that the word Osiris is a name altered by the Greeks, and that the primitive pronunciation must have been Osini; the s being only a Greek termination, and the aspiration, as in the other instances, dropped. Precluding any objection that might be offered from the unanimous testimony of the ancients, or the monument of Carpentras, on which some difficulties besides might be raised—for it is admitted that the name of Osiris may have undergone this alteration, either among the Phœnicians, or even in the vulgar language of Egypt-M. de Sacy alleges only in support of his conjecture, that the ancients have materially varied in explaining the name of Osiris, and the moderns in the etymologies they have offered of it; insisting but little

on what is advanced by Herodotus, that Osiris is the same as Dionysius in Greek: Οσίρις δε εστι Διονυσος κατ Ελλαδα γλώσσαν. Among the many explications which the ancients have given of this name, the most commonly adopted is πολυοφθαλμος; ΟΣ, according to Plutarch, signifying much, and IPI, an eye: - but this is scarcely admissible, at least from what we know of the ancient language of Egypt through the Coptic; for in that, though ou signify much, yet eye is expressed by Bax. Hence M. de Sacy offers his suspicion that Plutarch's etymology is founded on a mixture of Phænician and Egyptian; and the name of Osiris rather came from out, much, and TXT be saw, as if this barbarous mixture formed ocuspe, who sees much; or it may be conjectured further that this name was formed from the two Egyptian words, out, much, and sope, the pupil of the eye. From the assurance of Plutarch, that the name of Osiris has many significations, but especially an efficacious and beneficent energy—τουνομα πολλα φραζει, ουχ' ήμιστα δε κρατος ενεργουν και αγαθοποιον - Jablonski has sought its etymology on the two Coptic words, ow, much, and IpI, to act-a derivation which, of all the others proposed by him, M. de Sacy most approves; but, adverting to that of Salmasius, who would pronounce the name Usiris, apprehending it to be the Coptic word CHPI son, preceded by the indefinite or, he recurs to Plutarch for another derivation, cited from a writer who pretends the true name of the God to have been Agragns, or, admitting what is styled a very probable correction, Aoigis, as signifying vigor, 70 ANAPEION. But as these several readings and etymologies all suppose a g in the last syllable, if the pronunciation be admitted which seems to result from the inscription, as deciphered by M. de Sacy, it may, he adds, be conjectured that Osnih or Osneh comes from out, much, and ENES, an age; or from out, much, and overs, illumination. To facilitate the admission of these derivations, it is observed, that in the Coptic the vowels of derivatives very frequently vary from those of their radicals—a circumstance noticed the rather, as suggesting a more systematic form which might be introduced into the Lexicons of that language, by arranging words according to their radicals, as in those of the Hebrew.

Returning to his subject, M. de Sacy concludes that the name of Osiris, or Osinis, written in Egyptian ocure, and pronounced ocure, or ocurie, may signify abundance of life, or duration; or else, deriving it from orwing, of which the primitive root is wing, abundance of light. To favour the last etymology, the name of Heliopolis, in the books of Moses,

is urged, as apparently demonstrating that Off, in the Egyptian, signified the Sun; and St. Cyril is quoted as an authority of great weight, who asserts positively, in his commentary on Hosea, that, 'according to the mythology of the Egyptians, Apis is the son of the Moon, and descendant from the Sun. In their language, on signifies the Sun.' That in the Coptic the Sun is commonly styled opH, and also that there is reason to suppose this was his ancient name, M. de Sacy very readily allows; but contends that he might have been as well designated by the word orwns, which signifies to manifest, show, appear, enlighten; and further supposes that it is the true etymology of the name of Ammon, Vorung, formed from II, characterising the adjective, and orung, he that manifests or enlightens; - and every thing that Jablonski has advanced on this subject is referred to, as justifying the etymology proposed.

Though M. de Sacy still professes to doubt, after all he has offered on the name of Osiris, he cannot forbear adding another argument, which appears to himself of considerable weight, inasmuch as it almost justifies the substitution of v for e in the name, and well accords with the interpretation given by Plutarch of its signification. Na, in Coptic, signifies to see; and if the permutation of vowels be admitted, there would be no difficulty in deriving the word Osinib from Ocu, much, and

112 %, to see; nor in rendering it by πολυοφθαλμος.

The same pronunciation will indicate, perhaps, the reason, as our author conjectures, of the signification To andquion; for in the Chaldee, ouseban, july, or ousebna, NJWY, and in the Syriac ouschno, Lio a, is of the same import. This word existed, M. de Sacy thinks, indisputably in the Phænician, probably in the Egyptian, and might easily be regarded as the radical of Osinib.

In the discussions here offered upon the name of Osiris, several positions occur, to which we cannot accede. Some of our objections may be anticipated from the preceding remarks; but as this article unavoidably extends to a considerable length, and the subject of it will again come under notice, we are for

the present obliged to postpone them.

The name of Egypt, after appearing in the Greek inscription, M. de Sacy sought for in the Egyptian, and could scarcely suspect that he had not found it in XHEEL, which is that given it by the Copts, which sometimes occurs in the Hebrew Scriptures, and was recognised in his time by St. Jerom; or else Misr, the ordinary name of Egypt among the Hebrews, Syrians, and other Orientals, with whom our author includes

the Phoenicians. Entertaining, however, some doubts as to the value of the letter he had taken for a resch, and having no reason to believe that Egypt had ever been called Misr by its own inhabitants, he was led from this last observation-joined to the presumption that the word should be read Misr, in the order of writing from right to left, and the form of most of the letters whose import he had determined—to another conjecture, which he here mentions for the sake of combating, as he had previously communicated it to some learned foreigners. Accordingly he states, that, recollecting in an ecclesiastical writer the mention of several cities in Lower Egypt which spoke Phoenician, as this monument was found in that district, he conjectured that the inscription which he had termed Egyptian was perhaps really Phænician. This was deemed not inconsistent with the decree which ordained, in the Greek, that it should be engraven in three kinds of characters—the sacred, TEPOIS, local, ΕΓΧΩΡΙΟΙΣ, and Greek, ΈΛΛΕΝΙΚΟΙΣ; understanding by local the particular character of each province. But on reading St. Cyril more attentively, he was convinced that the language of Lower Egypt was not to be taken for Phænician; but only that in five cities in that district, of which Rhinocorura was one, the Phænician was spoken in concurrence with the Egyptian, and that more attention was paid to the former; the introduction of which into this part of Egypt St. Cyril attributes to a colony of Jews: - Αί προς τοις περασι της Λιγυπτε πολεις πρωτον παραδεχονται ΤΟ ΣΩΤΗΡΙΟΝ ΚΗΡΥΓ-ΜΑ΄ πεντε δε αυται ων δη και πρωτην ειναι φαμεν την νυνι Ρινοποςους ητων, λαλεσι μεν και τη γλωσση ΧΑΝΑΝΙΤΙΔΙ. Εσπουδασται γας τοις εν ταυταις ταις πολεσιν, ουχι της Αιγυπτιών φωνης μεταποιεισθαι τοσουτον, όσον της Συζων. The cities on the confines of Egypt first received the preaching of the Gospel. Five of these, of which Rhinocorura is first, speak also (that is, beside the Egyptian) the language of Chanaan: for the inhabitants of these cities are less solicitous in cultivating the Egyptian language than that of the Syrians.

Since nothing could be drawn from this passage by M. de Sacy to support his first conjectures, it followed of course that the character of the inscription was to be regarded as Egyptian, and of the kind which Herodotus has styled δημοτικά γεμμματά, popular, or vulgar, in contradistinction to the sacred, issa; as these, IEPOIE, are opposed to local, ΕΓΧΩΡΙΟΙΣ. And having suggested that the order of the Egyptian inscription is from right to left, like the Hebrew, on the authority of the same historian, our author proceeds to point out the error of Wilkins, who, in his dissertation De Lingua Coptica, at the end of the Lord's Prayer by Chamberlayne (p. 85), regards this assertion of the father of history as one of the fables which Diodorus

525

Siculus reproaches Herodotus with having too lightly adopted. It is also proper, he adds, to observe that the remark of Herodotus applies equally to the two kinds of writing used by the Egyptians; for he almost immediately subjoins, Διφασιοισι δε γραμμασι χρεωνται. Και τα μεν αυτων, ΊΡΑ, τα δε, ΔΗΜΟΤΙΚΑ καλεεται—that the one is called the sacred, and the other the

vulgar.

Clemens of Alexandria, in a passage that may be looked upon as classical, attributes to the Egyptians three kinds of writing. Those among the Egyptians who are brought up to learning. acquire, in the first place, that mode of writing which is called epistolographic; next, the hieratic, which is used by the hieragrammatists; and, lastly, the most perfect, which is the hieroglyphic.' If this account appear to differ from that of Herodotus and Diodorus Siculus, who speak only of two kinds, it is, as our author observes, easy to reconcile them; nor is it necessary, with Wilkins, to suppose that, under the name of epistolographic, Clemens is to be understood as speaking of the Greek character; for the two historians are better explained by the passage of the father to have intended, under the name of vulgar writing, in opposition to the sacred or hieroglyphic, the two kinds of bieratic and epistolographic. These two kinds, in reality, have this in common, that they were never regarded as sacred, and that the knowledge of them was never ranked among the mysteries of religion, though the one were of universal usage, and the other peculiar to the ministers of religion. It is likewise obvious to imagine that these denominations, belonging to an age posterior to Herodotus, were copied by Diodorus at a time when the knowledge of hieroglyphics was entirely lost; and imply that, at the epoch when hieroglyphic writing had sunk into disuse, the priests, accustomed to wrap up from the vulgar a knowledge of their mysteries, would adopt a mode of writing, whether alphabetic or syllabic, different from that used in ordinary life. Hence the name of hieratic might be given to distinguish it from the vulgar or runninghand, distinguished by the name of epistolographic.

The introduction of this balf-sacred sort of writing, M. de Sacy conjectures, might have occasioned the total oblivion into which hieroglyphic writing fell, as being both more easy to

learn, and more commodious to write.

But no farther to indulge conjecture, it is concluded, from a passage of Plutarch, that the vulgar character of the Egyptians was composed of twenty-five letters; for that author observes, that the square of five gives the exact number of Egyptian letters, and years in the life of Apis. The inscription however under consideration gives more, probably, one while, because the same letter may have been formed of detached strokes; at

another, several letters may have been joined by the graver. To which be added:

1. That, as there are capital letters and small, the number of

their figures are doubled.

12. That there may be some supernumerary letters, foreign to the Egyptian and borrowed from the Greek, such as ξ in the name of Alexander, and perhaps the vowels ε and η.

form, accordingly as they are joined or detached, initial or final: of this the Hebrew, Syriac, and Arabic, abound with examples.

4. There may also be in it abbreviations or monograms. Of the letters which enter not into any word M. de Sacy has meddled with, some occur that still appear to remain in the Coptic; these are the †, Dei, and the \times , genga.'

After remarking that little or no similitude is discoverable between the characters of this inscription, and those on the mummies, published by Montfaucon and count Caylus, our author ventures to think, of the words he has endeavoured to decipher, no doubt will remain in respect to the names Alexander, Alexandria, Ptolemy, Arsinoë, and Epiphanes: and as these words in themselves supply a considerable number of letters, so they present another datum, which is, that the Egyptian inscription is by no means a literal translation of the Greek; for the names of Ptolemy and Arsinoë are said to recur more often in the Egyptian than in the Greek; and the places where these two names are found in the inscriptions do not appear to correspond.

In attending also to the many epithets and titles of honour-ascribed to Ptolemy Epiphanes, who is styled $AI\Omega NOBIO\Sigma$, $H\Gamma A\Pi HMENO\Sigma$ $\Upsilon\Pi O$ $TO\Upsilon$ $\Phi\Theta A$, $\Theta EO\Sigma$ $E\Pi I\Phi ANH\Sigma$ $E\Upsilon XA-PI\Sigma TO\Sigma$; and the different intervals of the space, in particular parts of the inscription, between the name of Ptolemy Epiphanes and those of his father and mother Ptolemy and Arsinoë; M. de Sacy is induced to believe that the Egyptian style is less emphatic than the Greek, and points out a passage to prove it. But, with proper deference, we would ask, If the anomalies thus noticed do not suggest a doubt, whether these names have

after all been really ascertained?

Reverting again to the Greek inscription, several other proper names are pointed out besides those supposed to have been found in the Egyptian; such are the names of the high-priest consecrated to the worship of Alexander and the Ptolemies, the priestesses presiding over the worship of the queens Arsinoë wife of Philadelphus, Arsinoë wife of Philadelphus, Arsinoë wife of Philopator, and Berenice wife of Euergetes, which appear in the 4th and 5th lines:—
EΦ ΙΕΡΕΩΣ ΛΕΤΟΥ ΤΟΥ ΔΕ ΤΟΥ ΑΛΕΞΑΝΔΡΟΥ ΚΑΙ ΘΕΩΝ

ΣΩΤΗΡΩΝ ΚΑΙ ΘΕΩΝ ΑΔΕΛΦΩΝ ΚΑΙ ΘΕΩΝ ΕΤΕΡΓΕΤΩΝ ΚΑΙ ΘΕΩΝ ΦΙΛΟΠΑΤΟΡΩΝ ΚΑΙ ΘΕΟΥ ΕΠΙΦΑΝΟΥΣ ΕΥΧΑ-ΡΙΣΤΟΥ ΑΘΛΟΦΟΡΟΥ ΒΕΡΕΝΙΚΗΣ ΕΤΕΡΓΕΤΙΔΟΣ ΠΥΡΡΑΣ ΤΗΣ ΦΙΛΙΝΟΥ ΚΑΝΗΦΟΡΟΥ ΑΡΣΙΝΟΗΣ ΦΙΛΑΔΕΛΦΟΥ ΑΡΕΙΑΣ ΤΗΣ ΔΙΟΓΕΝΟΥΣ ΙΕΡΕΙΑΣ ΑΡΣΙΝΟΗΣ ΦΙΛΟΠΑΤΟΡΟΣ ΕΙΡΗ-NHY THY ITOAEMAIOT. M. de Sacy observes that, in the Egyptian inscription which apparently corresponds to this part of the Greek, many proper names are seen to occur; but not answering to these, he asks, if these ministers of worship of either might not have had two names, the one Greek, and the other Egyptian?—This suggestion is certainly pertinent; for the Jewish history, for example, furnishes instances of these double names. In respest, however, to the first of these, we cannot help understanding it, not as a proper name, but simply an appellative of office-priest of the EAGLE.

In the 3d line, M. de Sacy flattered himself with the hope of finding the name of the month Xanthicus, written in the Greek EANDIKOY, and joined to the Egyptian month Mechir: MH-ΝΟΣ ΞΑΝΔΙΚΟΥ ΤΕΤΡΑΔΙ ΑΙΓΥΠΤΙΩΝ ΔΕ ΜΕΧΕΙΡ ΟΚΤΩ-KAIAEKATH; but unfortunately the word MEXEIP is effaced

or broken off.

Though all the researches of our author have been attended with so little success, he does not entirely despair. The inspection of the monument itself, he thinks, may contribute materially to it, and the efforts of other learned men who may make it their study. Wishing those who shall attempt it success, he concludes with liberally declaring, in a manner congruous and becoming to his modesty and merit, that such success would be beholden by him with unfeigned satisfaction, though it should prove him utterly erroneous.

M. de Sacy has subjoined to his letter a postscript, which, however, is scarcely intelligible without the aid of engraving.

In addition to the foregoing, it may be proper to observe, that the Society of Antiquaries has just published an en-graving of the Greek inscription. From so learned a body something more might have been looked for than a bare facsimile, the accuracy of which requires to be justified. One of its members indeed, GRANVILLE PENN, Esquire, has favoured his friends with a printed copy of it, from the stone, in a more legible form; and we flatter ourselves with the indulgence of that gentleman in venturing to annex it, with the advantages it derives from his acuteness and erudition.

The GREEK VERSION of the DECREE of the EGYPTIAN PRIESTS, in honour of PTOLEMY THE FIFTH, surnamed EPIPHANES. From the Stone*, inscribed in the SACRED and VULGAR EGYPTIAN, and the GREEK Characters, taken from the French at the Surrender of Alexandria.

[Not having an immediate opportunity of referring to the stone, we have not presumed to alter what appear to be oversights; otherwise we should have given as more properous in line 6, for eignoperous; for enem, in line 46, en; and relaxed, in the same line, for relaxed; and other similar corrections. Rev.]

ΒΑΣΙΛΕΥΟΝΤΟΣ ΤΟΥ ΝΕΟΥ, και παραλαξοντός την βασιλειαν παρα τε πατρος, κυριε βασιλειων, μεγαλοδοξε, τε την Αιγυπτον καταστησαμένε, και τα προς τες (2 θεες ευσέξες, αντιπαλών υπερτέρε, τε τον βιον των ανθεωπων επανοεθωσαντος, κυριε τειακονταετηριδων καθαπερ ο Ήταιστος ο μεγας, βασιλεως, καθαπερ ο Ήλιος θμεγας βασιλευς, των τε ανώ και των κατω χωρων, εκγονε Θεων Φιλοπα-τοςων, ον ο Ήφαιστος εδοκιμασεν, ώ ο Ήλιος εδωκεν την νικην, εικονος ζωσης τε Διος, υίε τε Ήλιε, ΠΤΟΛΕΜΑΙΟΥ τε (αιωνοδιε, ηγαπημενε ύπο τε Φθα, ετες ενατε εφ' ίερεως Λετε τε δε τε Αλεξανδρε, και Θεων Σωτηρων, και Θεων Αδελφων, και Θεων Ευεργετων, και Θεων Φιλοπατόρων, και 'Θευ Επιφανυς ευχαριστυ, αθλοφορυ Βερενικης Ευεργετιδος Πυρόας της φιλινε κανηφορε, Αρσινοης Φιλαδελφε Αρείας της διογενές ίερείας, Αρσίνοης Φιλοπατόρος Ειρηνής 6 της Πτο. λεμαιε, μηνος Ξανδικε τετραδι, Λιγυπτιων δε Μεχειρ οκτωκαιδεκατη, ΨΗΦΙΣΜΑ οί αρχιερεις, και προφηται, και οί εις το αδυτον ειξπορευομένοι προς τον στολισμού των 1 θεων, και πτεροφοραι, και ίερογραμματεις, και οί αλλοι ίερεις παντες οί απαντησαντες εκ των κατα την χωραν ίερων εις Μεμφιν τω βασιλει, προς την πανηγυριν της παραληψεώς της (8 βασιλείας της Πτολεμαία αιωνόδια ηγαπημένα ύπο τε Φθα, θεε Επιφανες, ευχαριστε, ήν παρελαβεν παρα τε πατρος αυτε, συναχθεντες εν τω εν Μεμφη ίερω τη ήμερα ταυτή. EIIIAN.

ΘΕΠΕΙΔΗ βασιλευς ΠΤΟΛΕΜΑΙΟΣ αιωνοδιος, ηγαπημενος υπο τε Φθα, ΘΕΟΣ ΕΠΙΦΑΝΗΣ, ευχαριστος, ο εγ βασιλεως Πτο-λεμαιε και βασιλισσης Αρσινοης ΘΕΩΝ ΦΙΛΟΠΑΤΟΡΩΝ, κατα πολλα ευεργετηκεν τα θ'ίερα, και τος την έαυτε βασιλειαν τασσομενες άπαντας, ύπαρχων θεος εκ θεε και θεας, καθαπερ Ωρος ο της Ισιος και Οσιριδος υίος ο επαμυνας τω πατρι αυτε Οσιρει, τα προς θεες (11 ευεργετικώς διακείμενος, ανα-

^{*} The numerals in this inscription correspond with the lines on the stone; as do the dotted lines in proportional extent to the chasms in the inscription.

τεθεικεν εις τα ίερα αργυριας τε και σιτικας προςοδυς, και δαπανας πολλας υπομεμενηκέν, ένεκα τη την Αιγυπτον εις ευδιαν αγαγειν και τα ίερα καταστησασθαι, (12 ταις τε έαυτε δυναμεσιν πεφιλανθρωπηκε πασαις και απο των υπαρχεσων εν Αιγυπτω προςοδων και φορολογιων τινας μεν εις τελος αφηκεν, αλλας τε κεκεφικέν, όπως ότε λαος και οἱ αλλοι παντες εν (13 ευθηνία ωσιν επι της έαυτε βασιλείας τατε βασιλικα οφειληματα ά προςοφειλον οί εν Αιγυπτω και εν τη λοιπη βασιλεία αυτε, οντα πολλα, τω πληθεί αφηκέν και τες εν ταις φυλακαις (4 απηγμενες, και τες εν αιτιαις οντας εκ πολλε χρονε, απελυσε των ενκεκλημμενων προςεταξε δε και τας προςοδες των ίερων, και τας διδομενας εις αυτα κατενιαυτον συνταξεις σιτι κας τε και αργυρικας, έμοιως δε και τας καθηκουσας απομοιρας τοις θεοις απο της αμπελιτιδος γης, και των παραδεισων, και των αλλων των ύπαρχοντων τοις θεοις επι τε πατρος αυτε, (16 μενείν επι χωρας προςεταξεν δε και περι των ίερεων όπως μηθεν πλειον διδωσιν εις το τελεστικον ε ετασσοντο έως τε πρωτε ετες επι τε πατρος αυτε: απελυσεν δε και τες εκ των (17 ίερων εθνων τε κατενιαυτον εις Αλεξανδρειαν καταπλε, προςεταξεν δε και την συλληψιν εις την ναυτειαν μη ποιεισθαι. των τε εις το βασιλικον συντελεμενων εν τοις ίεροις βυσσινων (18 οθονιων απελυσεν τα δυο μερη, τα τε εγλειμμενα παντα εν τοις προτερον χρονοις αποκατεστησεν εις την καθηκεσαν ταξιν, φροντιζων όπως τα ειθισμενα συντεληται τοις θεοις κατα το (19 προςηκον. όμοιως δε και το δικαιον πασιν απενειμέν, καθαπέρ Ερμης ό μέγας και μεγας προςεταξε δε και τες καταπορευομένες εκ τε των μαγιμων και των αλλων των αλλοτεια (20 φρονησαντων εν τοις κατα την ταραχην καιροις κατελθοντας, μενείν επί των ιδίων κτησεων προενοήθη δε, και όπως εξαποσταλωσιν δυναμεις ίππικαι τε και πεζικαι και νηες επι της επελθοντας (21 επι την Αιγυπτον κατα τε την δαλασσαν και την ηπειρον, υπομεινας δαπανας αργυρικάς τε και σιτικάς μεγάλας, έπως τα θ'ίερα και οί εν αυτή παντές εν ασφαλεία ωσιν παραγινομε 22 νος δε και εις Λυκωνπολιν την εν τη Βεσιριτη, ή ην κατειλημμενη και οχυρωμενη προς πολιορκίαν όπλων τε παραθεσει δαψιλεστερα και τη αλλη χορηγια παση, ώς αν εκ πολλε (23 χρονε συνεστηκυιας της αλλοτοιοτητος τοις επισυναχθεισιν εις αυτην ασεξεσιν, οί ησαν εις τε τα ίερα και τες εν Αιγυπτω κατοικεντας πολλα κακα συντετελεσμενοι και αν ετικαθισας χωμασιν τε και ταφροις και τειχεσιν αυτην αξιολογοις περιελαζεν. τε τε Νειλε την αναξασιν μεγαλην ποιησαμενε εν τω ογδοω ετει, και ειθισμενε κατακλυζειν τα (25 πεδια, κατεσγέν εκ πολλων τοπων, οχυρωσας τα στοματά των ποταμών, χορηγησας εις αυτα χεηματων πληθος εκ ολιγον, και καταστησας κππεις τε και πεζες προς τη φυλακή (26 αυτων εν ολιγω χρονώ, την τε πολιν κατα κρατος είλεν, και τες εν αυτη ασεζεις παντας διεφθειρεν, καθαπερ [Έρμ]ης και 'Ωρος ο της Ισιος και Οσιριος υίος εχει-בשלמידם דשה בי דפוב מטדפוב (בין דפתפוב מהפדמידמה הפסדבפטי, דשה מפק-APP. Vol. 35.

γησαμενες των αποσταντων επί τε έαυτε πατρος, και την χωραν αντας, και τα ίερα αδικησαντας, παραγινομένος εις Μεμφιν, επαμυνων (26 τω πατρι και τη έαυτε βασιλεία, παντας εκολασεν καθηκοντως, καθ' όν καιρον παρεγενηθη προς το συστελεσθη[σεσθαι τα] προςηκοντα rousina in mapany del the Basineias achner de nai ta er (2) tois iegois οφειλομένα εις το βασιλικον έως το ογδου ετος, οντα εις σιτυ τε και αργυρια πληθος ακ ολιγον, ώσαυ τως δε κ αι τας τιμας των μη συντετελεσμένων εις το βασιλικόν βυσσινών οθ [ovi] ων, και των συντετελέσμενων τα προς τον δειγματισμον διαφορα έως των αυτων χρονων. απελυσεν δε τα ίερα και της μενης αρταξης τη αρυρα της ίερας γης, και της αμπελιτιδος όμοι [ως] (3) το κεραμιον τη αρερά τω τε Απει και τω Μνευει πολλα εδωρησατο, και τοις αλλοις ίεροις ζωιοις τοις εν Αιγυπτω πολυ κρεισσον των προ αυτε βασιλειων, φροντιζων ύπερ των ανηκο (32 αυτα δια παντος, τα τ' εις τας ταφας αυτων καθηκοντα διδες δαψιλως και ενδοξως, και τα τελισκομενα εις τα ιδια ίερα וופדם שני אמו דמיקץ עפבשי אמו דשי מאאשי דשי יסוו[ליובישי], (33 דם דב τιμια των ίερων και της Αιγυπτε διατετηρηκέν επι χωρας, ακολεθως τοις νομοις και το Απιειον εργοις πολυτελεσιν κατεσκευασεν, χορηγησας εις αυτο χρυσιε τε κ[αι αργυρι] (48 και λιθων πολυτελων πληθος εκ ολιγον, και ίερα και ναθς και βωμες ίδρυσατο, τα τε προςδεομενα επισκευης מפסבלוספלשסמדס, בצשי שבש בטבפיצבדואש בי דסוב מיחאש[סו דחי] (35 שבוסי לומνοιαν προςπυνθανομενος τε τα των ίερων τιμιωτατα ανανευτο επι της έαυτε βατιλειας ως καθηκει ΑΝΘ΄ ΩΝ, δεδωκασιν αυτώ οί θεοι ύγιειαν, νικην, κρατος, και ταλλ' αγα[θα παντα,] (36 της βασιλειας διαμενεσης αυτώ και τοις τεκνοις εις τον απαντα χρονον ΑΓΑΘΗ ΤΥΧΗ-

ΕΔΟΞΕΝ τοις ίερευσι των κατα την χωραν ίερων παντων τα πημενώ ύπο τε Φθα, ΘΕΩ ΕΠΙΦΑΝΕΙ, ευχαριστώ, όμοιως δε και τα των γονεων αυτε Θεων Φιλοπατορων, και τα των προγονων Θεων Ευεργ[ετων, και τα] (16 των Θεων Αδελφων, και τα των Θεων Σωτηρων, επαυξειν μεγαλως στησαι δε τε αιωνοδιε βασιλεως ΠΤΟΛΕΜΑΙΟΥ, ΘΕΟΥ ΕΠΙΦΑΝΟΥΣ, ευχαριστε, εικονα εν έκαστω ίερω εν τω επιφα (39 ή προςονομασθησεται, ΠΤΟΛΕΜΑΙΟΥ ΤΟΥ ΕΠΑΜΥΝΑΝΤΟΣ ΤΗ ΑΙΓΥΠΤΩ, ή παρεστηξεται ο χυριωτατος θεος το ispo διδος αυτώ όπλον νικητικον, α εσται κατεσκευασμεν [α · · · ••••• Τροπον, και της ίερεις Βεραπευείν τας είκονας τρις της ήμερας, και παρατιθέναι αυταις ίερον κοσμον, και τ'αλλα τα νομίζο-עצים סטידבאבוי אמלם אמו דפוב מאאפוב שבפוב בי [לב בספדמוב אמו דמ] יאיןγυρεσιν Ιδρυσασθαι δε βασιλει ΠΤΟΛΕΜΑΙΩ, ΘΕΩ ΕΠΙΦΑΝΕΙ, ευχαριστω, τω εγ βασιλεως Πτολεμαια και βασιλισσης Αρσινοης, Θεων Φιλοπατορων, ξοανον τε και ναον χρ[υσιον (42 ίερων, και καθιδρυσαι εν τοις αδυτοις μετά των αλλων ναων, και εν ταις μεγαλαις πανηγυρεσιν εν αίς εξοδειαι των ναων γινονται και τον τε θει ΕΠΙΦΑΝΟΥΣ, ευ[χαριστε ναον συνε] τοδευείν όπως δ' ευση-

μος η νυν τε και εις τον επειτα χρονον, επικεισθαι τω ναω τας τε βασιλεως χρυσας βασιλείας δεκα αίς προςκεισεται ασπις, εσται δ' αυτών εν τω μεσω ή καλεμενη βασιλεία ΨΧΕΝΤ, ήν περίθεμενος ειζηλθεν εις το εν Μεμφ[η συν] τελεσθη τα νομιζομενα τη παραληψεί της βασιλείας. επιθείναι δε και επι τυ περι τας βασιλείας τετραγωνε, κατά το προειρημένον βασιλείον, φυλάκτη-επιφανή ποιησαντος την τε ανω χωραν και την κατω, και επει την τριαναδα τετε Μεσορη εν ή τα γενεθλια το βασιλεως αγεται, όμοιως βασιλείαν παρά το πατρος, επωνυμός νενομικάσιν έν τοις ίεροις, αί δη πολλων αγαθων αρχηγοι πασιν εισιν, αγειν τας ήμερας ταυτας έορτ[ην δε και πανηγυριν εν τοις κατα την Ai] (48 γυπτον lepois κατα μηνα, και συντελειν εν αυτοις θυσιας τε και σπονδας και τ' αλλα τα νομιζομενα καθα και εν ταις αλλαις πανηγυρεσιν, τας δε γινομενας προθε σεις . . . ••••• τοις ίεροις, αγειν δε έορτην και πανηγυριν τω αιωνοδιω, και ηγαπημενώ ύπο τε Φθα, βασιλει ΠΤΟΛΕΜΑΙΩ ΘΕΩ ΕΠΙΦΑΝΕΙ ευχαριστω κατεν[ιαυτον (30 xwear and the valuating the Θωυθ, εφ' ήμερας πεντε, εν αίς και στεφανηφορεσεσιν, συντελεντες θυσιας και σπονδας και τ' αλλα τα καθηκοντα προςαγορε...... (51 και τε ΘΕΟΥ ΕΠΙΦΑΝΟΥΣ, ευχαριστυ, ίερεις προς τοις αλλοις ονομασιν των θεων ων ίερατευυσι, και καταχωρισαι εις παντας της χρηματισμής, και εις της δ (52 lepateian auth. efeinai de nai tois αλλοις ιδιωταις αγειν την έορτην, και τον προειρημένον ναον ίδρυεσθαι, ... (53 . . 15 κατενιαυτον όπως γνωριμον η διοτι οί εν Αιγυπτω αυξεσι και τιμωσι ΤΟΝ ΘΕΟΝ ΕΠΙΦΑΝΗ, ευχαριστον, βασιλεα, καθαπερ 154 . . στερευ λίθυ, τοις τε ΊΕΡΟΙΣ και ΕΓΧΩΡΙΟΙΣ, και ΈΛΛΗΝΙ-ΚΟΙΣ ΓΡΑΜΜΑΣΙΝ, και στησαι εν έκαστω των τε πρωτων και δευτε-

We cannot close this article without expressing an expectation that Mr. Penn will favour the public with such an explanation and comment as the acuteness and learning of his former disquisitions fully warrant us to look for. ART. V.—Voyage dans la Basse et la Haute Egypte, &c.
Paris. 1802.

Travels through Upper and Lower Egypt, during the Campaigns of General Bonaparte, by Vivant Denon. 2 Vols. imperial Folio; one of Text, the other of Plates. 221. Imported by De Bosse.

I HE horrors of War have been frequently softened by the most interesting traits of humanity; and Science, in the midst of his devastations, has, in almost every age, followed in silence, and collected her varied stores, unappalled by the din of arms. It was war that furnished Polybius and Arrian with their choicest treasures; and the little we know of Gaul or Britain, of the customs and religions of their earliest inhabitants, are detailed by Cæsar in the history of his conquests. The ambition of France, anxious to excel both in arts and arms, led into Egypt, with her warriors, a band of well-instructed philosophers; and the institution of a philosophical society was projected and executed on the first moment of tranquillity—at the very dawn of the first ray of security. Bonaparte himself has not attempted to rival Cæsar or Xenophon; and has neither recorded his conquest of Egypt, nor his retreat from Syria: but his admonitions and encouragement animated this newly-founded institute, and, under his protection, its members have been able to examine those objects in quiet, which other travelers were obliged to glance at with too timid a rapidity, or a control not very consistent with accurate discrimination. It is however highly creditable to former observers, particularly to Pococke and Norden, that these more cool examinations have added so little to what they have described, and that our later informations, with the exception only of more geographical accuracy, rather relate to changes produced by time, or the action of the elements, than add to any thing left unexplored, either from carelessness or inatten-The present work is, nevertheless, of great importance: we now notice it with pleasure; and shall at a future period more accurately appreciate its merits.

These superb volumes are designed to include whatever was discovered during the late expedition; and we have waited for them with no common anxiety. Their splendor is beyond example—even during the profuse expenditure of the French monarchy, when literature shared its regards, and when utility and ornament, as in the "Neptune François," went hand in hand. As at this period every political notice marks the temper of the moment, and is on that account interesting, we shall translate the Dedication entire, and without a comment. It is singular, however, that our author could not flatter his hero without recurring

to fabulous exploits.

TO BONAPARTE.

To unite the brilliancy of your name with the splendor of the monuments of Egypt, is to renew the connexion of the glorious annals of our age with the fabulous æras of history: it is to rekindle the ashes of Sesostris and Mendes—like you conquerors; like you, benefactors.

Europe, when it learns that I accompanied you in one of your most celebrated expeditions, will receive my work with the most eager interest. Nothing has been omitted to render it

worthy of the hero to whom I offer it.

VIVANT DENON.

The preface to this work consists of the discourse which the author designed to have read to the institute at Cairo, on his return from Upper Egypt. It contains an account of his difficulties, and the numerous inconveniences which necessarily attended him, in an army always in pursuit of an active enemy, whose numerous cavalry kept them constantly alert. Upper Egypt, the scene of his more numerous and interesting observations, was thus hurried over, amidst the confusion of active war; and some of the most striking objects were sketched on horseback. Yet there were periods of tranquillity, when he could examine and delineate with more care. As in this discourse—written when his ideas were tinged with all the glow of enthusiasm, with a spirit unfaded by time, and other impressions—we find a peculiar ardor and animation, we shall extract a few passages.

I saw at length the portico of Hermopolis; and its grand massy ruins gave me the first idea of the splendor of the colossal architecture of the Egyptians. On each stone of this edifice was

engraved, in my fancy, "Posterity! Eternity!"

"I was afterwards taught, at Dendera (Tentyris), that we must not seek for the beauty of architecture only in the Doric, Ionic, and Corinthian orders; but that, wherever a harmony of parts is conspicuous, there is beauty. The morning brought me to these remains; the evening forced me from them, agitated rather than satisfied. I had seen a hundred things, but a thousand had escaped me. I had, for the first time, entered the archives of the sciences and the arts, and was already conscious that I should see nothing in Egypt more beautiful—a truth which twenty journeys to Dendera have since confirmed. The temple of Isis is adorned by art and science, united by good taste. Astronomy, morality, and metaphysics, have their distinct forms; and these decorate the cielings, the frizes, the surbases, with as much taste as our meagre and insignificant arabesques adorn our parlours."

We marched over Thebes - Thebes, whose name alone recalls to the imagination ideas of immense extent. As if it would escape me, I made a sketch of its appearance the first moment I could perceive it; and I felt, in this moment, that you would partake the feelings which animated me. We were obliged to pass over it with rapidity. We could scarcely per-

ceive a monument when we were compelled to quit it.

On one side was a colossus, which we could only measure with the eye, and the astonishment raised by the sight of it. On the right were mountains excavated and engraved; on the left, temples, which, at the distance of a league, seemed to be similar rocks palaces, and other temples, from which I was torn with difficulty. I returned mechanically to seek the hundred gates — the poetical expression by which Homer, in a single word, describes this superb city—loading the soil with its porticoes, the extent of which the whole of Egypt could not contain. Seven visits have not satisfied the curiosity which this first glance excited; and on the fourth only was I able to reach the other side of the river.'

Our author next mentions his advance to Cosseir, and his visit to the barren shores of the Red Sea, 'where he first knew and revered the patient animal which nature seems to have placed in this region to repair the error she committed in creating a desert.' He returned by different routes to Thebes, following every detachment wherever it was sent. ' If the love of antiquity had often transformed me to a soldier,' continues he, 'the attention of the soldiers to my inquiries made them antiquaries.'—In the course of these travels he visited the tombs of the kings, and in these mysterious caverns formed an idea of the Egyptian paintings, their arms, furniture, instruments of music, &c. In these last journeys, also, he discovered that the hieroglyphics engraven on the walls were not the only books of this learned nation, as he observed, on the bas-reliefs, representations of persons in the act of writing.

I have found also that roll of papyrus, that unrivaled MS, which has already been the subject of your examination—a frail rival of the pyramids, a precious pledge of the preservative power of the climate, a monument respected by time, which forty ages place in the rank of the most ancient books."

On this subject we shall make only a single remark, which we may enlarge on hereafter; viz. that there is no accurate distinction between Egyptian and Grecian remains in these volumes. Whatever is ancient is supposed to be Egyptian. The manuscript is evidently alphabetic; and its relations to known

languages are sufficiently obvious;—nor is it possible to decide whether the persons in the act of writing may not be drawing plans or mathematical figures. Of this however, we shall pro-

bably speak more fully in another number.

Our author—whom we believe to be the same M. Denon whose Descriptions of Sicily and Malta, published some years since, we noticed with respect in their English dress—describes with an equal affectation of sensibility his voyage to Egypt. He speaks of the capture of Malta; which, however, he only witnessed imperfectly, and at a distance;—but he says enough to convince us, that, by a prior arrangement, the French had a party in the garrison superior to those who opposed them. A work of importance is disgraced by this idle parade: and when we reflect that, of the whole armament, not a single ship of war returned to France, much of this affectation might have perhaps been spared. We shall select one or two short instances alone.

As an avalanche, augmenting by the accumulation of snow, falling from the mountains, threatens, by its accelerated velocity and increasing bulk, to overwhelm the forests and the cities, so our fleet, now grown immense, inspired terror on every coast from which it could be discovered. Corsica, apprised of its appearance, felt no other emotion than that which so vast a spectacle must inspire. Sicily was astomshed—Malta stupefied.

Again:-

The fourth day' (after the capitulation of Malta) the general gave a supper to the newly-constituted authorities. They saw, with as much surprise as admiration, the martial elegance of our generals—an assembly of officers glowing with health, with spirit, with glory, and hope. They were struck with the imposing air of the commander-in-chief, whose expression heightened his stature.—'

" Pritchard's genteel, and Garrick six feet high."

M. Denon does not conceal his opinion of the importance of Malta, and anticipates, from this easy conquest, future success. The inhabitants, as we now know, were by no means friendly to the French: they shut up their shops, and concealed their women.

This beautiful city, where we saw no one but ourselves, appeared gloomy. These forts, these castles and bastions, these formidable fortifications, which seemed to tell the army that nothing could in future check its career, and that it had only to march to victory, made them return with pleasure to their ships.'

204

If the aspect of Malta be arid, we cannot perceive without admiration, that the smallest hill, however inconsiderable its portion of soil, is constantly a garden equally delicious and fertile, where all the plants of Asia and Africa may be accustomed to a colder climate. This first hot-house may supply another at Toulon, and the plants may at last reach Paris, without suffering the severe shocks which a rapid change of climate usually occasions. We might perhaps here naturalise the greater number of our exotics with which we annually furnish our stoves, that languish in the second, and die in the third year. The experiments already made on animals seem to support this system of gradual change.

We find nothing peculiarly interesting till we arrive on the coast of Egypt. The frigate in which M. Denon sailed was sent to examine whether their arrival had been suspected, or any preparations made to oppose their attempt. We shall transcribe our author's account of the first view of this celebrated shore.

'At noon we were twenty leagues from Alexandria. At four in the afternoon the centinels on the top called out 'Land!' At six we saw it from the deck. We had all the night a fresh breeze; and at break of day I perceived the coast from the west, which extended, like a white ribbon, at the extremity of the bluish horizon of the sea. Not a tree nor a habitation appeared. It was not only nature in her saddest array, but the destruction of nature — silence and death. The gaiety of our soldiers was not affected by the prospect. One of them said to his comrade, showing him the desert—'See! there are the six acres decreed to you*!' The general laugh which this jest excited shows that courage is disinterested; or, at least, that it arises from more noble sentiments.'

These coasts are very dangerous in stormy weather, and in the fogs of winter, since they are not to be seen before it is too late to avoid them. At some distance, M. Denon saw the tower of the Arabs, which he describes as a square building, furnished with bastions; but was not able to ascertain whether it were the Taposiris—the tomb of Osiris according to Procopius, the Chersonnesus of Strabo, or the Plinthine, from which the gulf derives its name. Though the garrison of Alexandria have since pushed its out-posts to this spot, no military commander seems to have had spirit or intelligence sufficient to obtain any more decisive account. Our author in sight of Alexandria, yields to the force of imagination; and, on contemplating its vast walls,

^{*} Six arpents' of land promised to every soldier.

flanked with numerous towers—which, however, contain only hills of sand, and some gardens where the pale green of the palm-tree scarcely tempers the burning whiteness of the ground—the Turkish Castle, the mosques, and minarets,' recurs to ancient history, and fills his page with the fancies of Cæsar, of Antony, and Cleopatra. Such lucubrations were not indeed very well timed; for in the very next hour his comrades hear of fourteen English vessels of war, which they escaped by only one night; and we find, by our author's own acknowledgement, that the convoy was mixed with the fleet, and in no condition to resist. He might well say, that, from this moment, he became a fatalist, and trusted to the star of Bonaparte. There was but one star that rose higher—it was sir Sidney Smith's. When the account of the English fleet was conveyed to Bonaparte, our author adds that he could not discover the slightest alteration in his countenance. 'He made me repeat the report; and, after a few minutes' silence, gave orders to land.' The landing was effected with great confusion, and with some loss. The escalade of Alexandria followed; but the consequences are concealed. Let us, however, attend to the author's narrative.

It is impossible to express what I felt in reaching Alexandria. There was no person to receive us, or impede our landing. We could scarcely prevail on some mendicants, who were sitting on their heels, to direct us to the head-quarters. The houses were shut up; those who had not courage to fight had fled; and those who were not killed, according to the eastern custom, had concealed themselves for fear of being murdered. All was new to us—the soil, the form of the buildings, the figures, the dress, and the language of the inhabitants. The first image presented to us was a burial-ground, covered with innumerable tombs of white marble, on a white soil, in which were many emaciated women, disguised in black habits and rags, who seemed like ghosts wandering among the tombs. The silence was only interrupted by the hissing of kites, which soared over these sanctuaries of the dead.'

'In the whole extent of this vast and melancholy city, I was reminded of the gaiety of Europe only by the noise and activity of the sparrows. I no longer recognised the dog, that faithful and generous companion of man, that lively and loyal courtier: he was here gloomy, selfish, a stranger to him whose house he inhabited: unconnected, but still a slave, he distrusted the man whose asylum he defended, and without horror devoured his remains.'

The general visited the forts, or rather the ruins; where some wretched cannons were placed on stones, which served them for carriages. He ordered every part to be destroyed, except that

which was necessary to oppose the incursions of the Bedouins; and was particularly attentive to the batteries calculated to defend the port.

We passed near the column of Pompey; and this, like all objects of reputation, loses its consequence on approaching it. It was so called in the fifteenth century, when knowledge began to awake, and literary men, rather than observers, were eager to give a name to every monument. These names were rendered sacred by tradition, and have passed from age to age without contradiction. A monument had been raised to Pompey at Alexandria, which could be no longer found; so that the honour was conferred on this column. It was afterwards supposed to be a trophy to Severus; though it was evidently erected on the ruins of the ancient city; while, in the time of Septimius Severus, the city of the Ptolemies was entire. To give this column a solid foundation, an obelisk has been raised on piles, on which they have placed an ugly pedestal. On the pedestal is elevated this beautiful column, surmounted by a Corinthian capital, rudely carved.'

This exceeds Smelfungus himself; yet, perhaps, it is on the whole well founded. The shaft alone deserves commendation; the pedestal has neither particular merit nor fault; and the execution of the capital is rude. On comparing the accounts of different authors with the descriptions of Dr. White, we are convinced that the pillar was never originally erected in this spot. Among the fallen pillars of the building, which the professor describes with such great appearance of accuracy and truth, a shaft of distinguished size, and of beautiful proportion, was probably discovered, and again raised, with a capital affixed, selected perhaps from its dimensions rather than the beauty of the execution. That it could not have been an original ornament of the building, is probable, from its loose and insecure foundation of stones, which certainly once served some other purpose, and from the statue apparently at one time placed on its top. This last argument is stronger than will be obvious at first sight. If a statue were raised at this height, a proportional distance would be necessary from which to see it. The column itself can be discerned from the sea; and the statue is in that case an appropriate ornament. It could not be surveyed from a court of a palace of any probable dimensions. The author, by a variety of observations and arguments, confirms this reasoning; and, in support of Dr. White's idea, though without being aware of his opinions, has shown that the remains of a splendid building, particularly of a square and a circus, are discoverable in this spot. Indeed the walls of Alexandria, which show the extent of the city in the time of the Ptolemies, may still be traced; but the contracted limits of the modern city display a

very heterogeneous mixture of former ruins of wood, of columns, of marble, and, every thing which, in the ruder ages of the califs, could be employed for the purpose of raising walls

with little labour or expense.

We pass over the account of the cisterns, which have a regular supply of good water—those cogent proofs of the most active benevolence-to notice the obelisk, or, as it is commonly called, the Needle of Cleopatra. The situation of this obelisk, compared with that which is fallen, shows that they once distinguished the entrance to one of the palaces of the Ptolemies. The state of these obelisks, and the fractures—which the author thinks must have existed at the time of their being fixed in this spot-prove that they were even then fragments, and probably brought from Higher Egypt. They might easily, he thinks, be conveyed to France, as a trophy of the conquest - a trophy, he adds, truly characteristic, because they are in themselves a mo-The hieroglyphics with which they are covered render them more valuable than the column of Pompey, which is only a shaft somewhat larger than we have been accustomed to The French cannot now accomplish this wish. The English officers, who entertained the same design, had a better title to it, on the same score; but, in the moment of writing, we are informed by the newspapers that the design is at least suspended, perhaps prevented, by authority. On examining the bases of these obelisks, we are told that they rest on a freestone. The pedestals usually added in Europe are an ornament which gives them a different character. The surbase of a Saracen building in the neighbourhood was evidently of Greek or Roman origin, since we find Doric capitals, whose shafts are immerged in the water; while Strabo tells us that the palace of the Ptolemies was washed by the sea.

The remains of many Saracenic buildings are in this spot, which the author describes shortly. It is remarkable that the wood of the sycamore continues uninjured, while the iron connected with it is destroyed. The Turkish mosque, once dedicated to St. Athanasius, was formerly kept with religious care from the access of Christians; but such has been the indolence of the mussulmen, that they have suffered the gates to rust on their hinges, and preferred maintaining a constant guard to repairing them. In the middle of the court of this mosque is an octagon temple, which contains a sarcophagus of singular beauty, covered with hieroglyphics, probably from Upper Egypt. As usual, our zealous antiquaries were eager to carry it off—as another trophy, we suppose, of the conquest. In this neighbourhood are three columns, not described by any traveler. They are on the ground, and probably the remains of some old build-

ing, though not in their original situation.

Bonaparte, 'who took Alexandria with the same rapidity

that St. Louis took Damietta,' did not however commit the same fault. To conceal the misery of this devoted city, he marched immediately, and encamped a great part of his army in the desert. In this desert they beheld a dreadful victim of frantic jealousy: the anecdote is horrible, but too characteristic to be omitted.

The second day after our march from Alexandria, some of our soldiers met a young woman bleeding, in the desert near Beda. She held a young infant in one hand, and the other was extended in search of some object which might guide her, or ward off what might injure her. Their curiosity was excited; they call their guide and interpreter; they approach, and hear the sighs of a miserable being, whose eyes were torn out a young woman! an infant in the desert!—With equal astonishment and curiosity, they question her, and learn that this frightful spectacle was the effect of jealous vengeance; and that, instead of murmuring, she only uttered prayers for the innocent being in her arms, who, partaking her misfortune, would die with misery and hunger. Our soldiers, moved with pity, gave her part of their ration, forgetting their own wants when they saw wants so much more urgent, and depriving themselves of the little water they had, at a time when they could procure no more. They saw a man approach in a violent fury, who, at a distance, feeding his eyes with the sight of his vengeance, followed his victims with the closest attention. He runs up, tears from the woman's hands the bread, the little water—the last source of existence which compassion had bestowed on misery, 'Stop!' says he, 'she has forfeited her own honour, and tarnished mine; -this infant is my disgrace; he is the offspring of criminality.' Our soldiers prevent his taking away the little food that they had given; when, irritated at seeing the object of his jealous fury become that of compassion, he draws a poniard and stabs her, seises the infant, and dashes it on the ground; then, stupidly brutal, he stands motionless, fixes his eyes on those who surround him, and braves their vengeance. quired whether there were no laws to repress such an atrocious abuse of authority; when they observed, that he had done aurong to stab her, because, if it had not pleased God that she should die, at the end of forty days some one might have received the wretched woman into their house, and maintained her, from charity."

The march through the desert was attended with many difficulties. They suffered extreme thirst; while water, from an optical delusion, was apparently near. The army was surrounded with enemies, who harassed it on every side; and those who wandered but a few paces from the column were cut off. They saw the Mamelukes, and were gradually accustomed to their appearance; but the latter, finding no cavalry, began to despise their enemies; and Mourad Bey threatened to cut them off like gourds. Near Embabey, they meet with an entrenched camp of the Mamelukes; and here commenced the first serious opposition. When Bonaparte had given his last orders, he said, pointing to the pyramids—'Go on, and recollect, that, from the top of these monuments, forty ages are surveying you.'

The most considerable body of the Mamelukes attacked the division under Dugua, with a rapidity which scarcely gave them time to form, and were received with a discharge of artillery which checked them; when, wheeling to the left, they rushed on the bayonets of Dessaix' division. A well-supported fire occasioned a second surprise. They were for a moment undetermined; but wishing on a sudden to turn the division, they passed between that of Reynier and Dessaix, and received the crossfire of both, which began to disconcert them. Having no further plan, one part returned to Embabey, and the other retreated to a grove of palm-trees on the west of the two divisions, whence they were dislodged by the sharp-shooters; after which, they crossed the Desert of the Pyramids. This was the party that in the end disputed with us the conquest of Upper Egypt. During this time, the other divisions, in approaching the village, suffered from the artillery of the entrenched camp.

It was resolved to attack this camp; and two divisions, under Rampont and Marmont, were ordered to attempt it. The remains of the Mamelukes in the camp attacked the former; and here the fire was most violent and fatal. They had no idea of our resistance, and actually thought we were tied together. In effect, the best cavalry of the east, perhaps in the world, were broken by a small corps bristled with bayonets. The clothes of some were set on fire by the discharges of our musquetry; and, when mortally wounded, were burnt in our front. The route was general, and our soldiers entered the camp with those who retreated: the other divisions prevented their escape, excepting by swimming the Nile. It was now no longer a battle, but a massacre. 'They filed off apparently to be shot; and some survived only to meet a watery death in the river.'

'In the midst of this carnage, we could not but be struck by the sublime contrast which the pure firmament of this happy climate afforded. A small number of French, under the conduct of a hero, had conquered one part of the world. An empire was changing its master: the pride of the Mamelukes was broken against the bayonets of our infantry. In this great and terrible scene, the results of which might be most important, the dust and the smoke scarcely clouded the lower part of the atmosphere. The star of day, rolling over its vast horison, peaceably finished its career;—a sublime proof of the immutable order of nature, that obeys eternal decrees in a calm and majestic silence which renders it still more awful.'

M. Denon, after this action, proceeds with Ménou to Rosetta; and we shall stop here, adding only a short account of the plates

of this splendid work.

The great attraction of these volumes consists in their excellence; and of the objects they represent we shall give a brief statement. It is necessary to remark, however, that they are of unequal value. The view, for instance, of the battle of the pyramids, one of the most considerable engravings in the volume, must be in a very great degree imaginary. The author was not a military man; and, had he been so, could only have furnished a few objects which immediately occurred to him. Those which are now presented to us have no more connexion with that action than the—

- fracta pereuntes cuspide Gallos, Aut labentis equo describere vulnere Parthi.'

The plan of the battle is peculiarly clear; and we need not add that it is accurate, since we are told it was corrected by Bonaparte himself. Indeed, nothing can be more perspicuous than

the author's description.

The plates in general are slight, or rather minute, sketches of the scenery observed during the voyage, views of places in Egypt, with various objects of antiquity. They are generally etched, but in many instances re-touched with the graver, and are striking, often characteristic, resemblances. The first plates representing different perspectives are those which occurred in the course of the navigation; comprehending distant views of Italy, Sicily, Malta, and Alexandria. The column of Pompey, the obelisks of Cleopatra, the pyramids, the Sphinx, sarcophagi, mosques, aqueducts, &c. are striking representations. Some of these, however, will not at first sight satisfy the reader. His imagination will revolt at the diminutive appearance of the pyramids, and of the cataracts of the Nile. But of the former, he will recollect that they are seen very remotely, and that their dimensions are fore-shortened; and if the latter strike him as only weirs of inconsiderable importance, after having been stunned' with the exaggerated descriptions of other travelers, he will perhaps remember Norden's observation, that he inquired for the cataracts when they were actually before him.

Upper Egypt is almost untrodden ground; and the remains of Memphis and Tentyris astonish with their massy dignity, with their bulky columns; but they are massy alone. Whatever allowance may be made for the augmentation of the soil, they must have always wanted grandeur from their wanting height.

Denon has remarked, and we selected the observation for this purpose, that beauty is not alone referable to the Grecian orders, but that it may be found in the just proportions of other columns. The proportion is not indeed faulty; but, in general, the height does not equal that of the Ionic column. The capital is often elegant; and, in two or three instances, it wants only the volute to become Corinthian; but, in many others, the ornaments are grotesque; and after the shaft has expanded in its capital, designed to give the appearance of firmness in its support of the pediment or building, the Egyptian column has an additional portion smaller in diameter than the capital. The introduction of the human form instead of the column, in the Persian manner, as managed by Egyptian artists, is extremely unpleasing. Their figures are rudely carved, and the legs joined in the usual manner of their sculptors. Yet we afterwards observe a striking difference in the remaining paintings on the ruins of Thebes, between the ornaments and hieroglyphics. There is a freedom in the attitudes, an elegance in the whole figure of the former, of which the latter is entirely destitute. We were particularly struck with the twenty-sixth figure of the 135th plate, as it so nearly resembles the harp engraved in Bruce's Travels, vol. i. p. 130, which has been censured as imaginary. The last of the harps represented by Bruce is apparently fanciful.

In general, the hieroglyphics and paintings seem to be very carefully drawn; and the countenances of the Egyptians, which are introduced in different groupes, are very characteristic, and appear from this circumstance to be resemblances. The planisphere and the zodiac are representations of considerable importance; but the various consequences which may be deduced

from these objects would lead us too far.

The plates are 141 in number; and though not striking and brilliant in their execution, certainly possess the merit of being faithful and accurate resemblances. We are warranted in saying this, from having in general compared them with the representations of Norden, Niebuhr, and Pococke, as well as from the incidental language of travelers, who could not have the smallest connexion with the present artist.

We shall resume this journey on a future occasion; and, without waiting for the returning period of another Appendix, pro-

bably take it up from the promised translation.

To the square to the state of

(To be continued.)

ART. VI .- Gli Animali parlanti, &c. Paris. 1802.

The Talking Animals; an Epic Poem, in twenty-seven Cantos. By Giambatista Casti. With four distinct Apologues by the same Author. 3 Vols. 8vo. 11. 16s. Imported by Payne and Mackinlay.

APOLOGUES, parables, and allegories, from the remotest zeras, have accompanied the progress of civilisation. With a fable, orators have kindled political fury: with a fable, statesmen have allayed popular discontent. Veiled in a parable, protected by an allegory, philosophers have not ceased to support science and morality in the ever-renewing struggle with barbarism and intolerance.

The apologue, its utility and peculiar character, we are led to contemplate by the work which we now introduce to our readers. The 'soul of wit' may, with equal correctness, be considered the soul of fable. Brevity is the quintessence of its nectar, the charm from which emanate its most bewitching attractions. Conciseness, simplicity, and address, are its genuine allurements. A pleasing familiarity of diction, combined with appropriate agency by animal interlocutors, lulls every suspicion of artifice: we trace the moral application; our vanity is flattered with a discovery; and the precept imperceptibly insinuates itself, without wounding our self-love, or alarming our indolence. Amidst our daily occupations a fable may accidentally meet our eye: the rapid movement of the story hurries us on; we snatch a salutary hint, which we should have never sought in a voluminous allegory. To adorn or elucidate some isolated truth, useful to mankind, with a felicitous smartness and precision, appears to us the perfection of the apologue.

On this principle every distinguished fabulist has founded his attempt to promote public instruction. Gabrias compressed his story into four lines. Æsop, the supposed inventor of this style of composition, is alike laconic and philosophic. Phædrus admirably unites brevity with refinement. Neither Pilpay nor Avienus is prolix. Faerno, among the best modern imitators, is seldom tedious. Even the fascinating La Fontaine, who ranges at large in his tales, forbade the graces of narration to lengthen his fables. The poems, usually denominated fables, by our Dryden, Gay, and many inferior writers, can only be classed, with correctness, among allegoric tales in verse.

In a 'grand apologue,' our poet, like Dryden in his 'Hind and Panther,' overleaps the boundary to which his classic precursors confined their surer tread. He offers us a mock-heroic, or fabulous narration, of eloquent animals, in twenty-seven cantos, not always 'of linked sweetness,' but always 'long drawn out.' His farrago of politics is communicated through animal agents, in easy burlesque stanzas of six lines—a species of

verse accommodated to satire, and approaching, in its effect, to our doggrel. We select for our readers, from one of the most poetical passages, a specimen; and subjoin a translation, which only pretends to show similar measures in our own language.

Venia la muffa intanto all' elefante,
E il mal umor già l'occhio torbo accenna,
La proboscide arriccia, e la pesante
Mole del capo tremolo tentenna,
Come all' urto di Borea in giogo Alpino
Scuote l'annosa cima altero pino.' Canto ii. st. 38.

At length the elephant, provok'd and sulky, Resentment in his turbid eyes appearing, His pond'rous head, unwieldy mass and bulky, Waves tremulous, his high proboscis rearing; On Alpine heights, midst northern tempests quaking, Like some proud pine, whose antique top is shaking.

The motives and pretensions of the author are detailed in his preface, and in a long and ludicrous canto, entitled 'Origine dell' Opera,' which he intended for the advanced guard, but which his editors have sent to the rear of his animal army.

The Preface, in a serious tone, slightly recapitulates the labours of preceding fabulists, and the stratagems they employed to elude tyranny, and instruct ignorance, under the mask of the apologue. Their principal attention was directed to regulate domestic manners, or individual conduct, in little pointed poems-' staccati poëmetti.' Subjects of political interest they touched only occasionally, and by accident. This reflexion suggested to the poet the hint of a 'greater apologue'-an extensive poem, divided into parts, which, by the introduction of speaking animals, might comprehend an entire political history, and offer to derision, as on a theatre, vices, defects, and follies, which the cold tablets of reason might not so efficaciously expose. Independent and impartial, he disavows all motives of indirectly attacking particular governments; and offers, as he presumes, a full but general picture of the customs, opinions, and prejudices, prevailing on subjects of state-policy, and the passions which usually influence the persons who direct administrations. He employs a strong colouring, sometimes charged, to produce an expression more striking. He considers his plan unique; unaware, perhaps, that Dryden, in the politico-religious poem to which we have alluded, had employed similar machinery, in a similar mode, on a scale less enlarged. The approbation bestowed on the four apologues appended to his work, a constant reading on fabulous topics, and the experience and observations which a long life had afforded in every part of Europe, encouraged his design. His vast accumulation of ideas rendered it more difficult to compress than to dilate his poem;

App. Vol. 35.

his age, eighty years, allowed no time to be concise. He presumes, however, that his labours may be useful in after ages, as the passions of men remain; and the degrees of their activity only differ. To the fervor of imagination, to the flame of poesy, he professes to have yielded every licence, consistently with the scope of his work. Such is the grave statement of our poet. We acknowledge we have not been often scorched by his poetic flame: perhaps the multitude of his quadrupeds, birds, and reptiles, affrighted us from the fire; and our politics we may have derived from profounder sources.

Deserting fact for fallacy, we shall epitomise for our romantic readers the author's prologue — which his Hibernian editors have converted into an epilogue — tracing the origin of the work.

In times beyond our chronology-'in quell' età pre-Adamitica'-it is reported, on the authority of a philosopher of ancient Memphis, who flourished before Trismegistus, that some convulsion of nature, either produced by water, fire, or 'cosa diavol fusse'-the devil knows what-deprived animals of the power of speech, which they once enjoyed in common with men. A Babel-confusion followed: barking, howling, hissing, lowing, neighing, and the various other prevailing bestial dialects, were introduced.—This work is presumed to have been composed while animals were yet 'parlanti.' It was discovered among the archives of a pagoda on the coast of Coromandel, marked in hieroglyphics on chalk tablets, by a rich Englishman, favourite of the chief bramin who visited the fane. After most earnest entreaties, the sage old Bramin was influenced by the English traveler to decipher this holy relic, and make a translation into the English language, that he might distinguish himself as a prodigy of learning among the 'dotti Britanni.' The translation, inscribed on parchment, the Englishman preserved in a tin-case, with an account of the discovery; but in his voyage to England, driven by a storm on the coast of Iceland, he perished with the vessel. Fortunately, a Maltese 'savant,' Bartolommeo Gianfichi, in pursuit of knowledge on board a whaleship, observed the mariners cutting up a fish, when they found this tin-case in the whale's belly. Here the poet philosophically expresses his admiration how it could have been swallowed—

> 'Che il gorgozzul della balena è stretto.' Since the whale's gullet is so strait.

The sailors, expecting gold, are disappointed; and Messer Bartolommeo, no linguist, is induced, by motives of vanity, to purchase the case and parchment for a few 'danari.' He meets a ship bound to Malta, and sends the case to be preserved by his eldest son until his return. The savant dies in Poland. His stupid eldest son does not long survive. The treasure descends

to a second son, Messer Valerio, an acute genius, who communicates the work to his friend Messer Casti, our poet, during his travels in Malta.

This prologue, of one hundred and three stanzas, closes with an apology for the 'strano linguaggio,' the outlandish globerish, frequently employed in the work. In the 'età pre-Adamitica,' usages and diction of a different nature prevailed: these the author discovers; but he is obliged to adopt the modern titles of majesty, count, baron, general, colonel, &c. because the devil himself knows not what titles were then in use—'neppure il diavolo li sa.'

We have led our readers cautiously around the suburbs. In exploring the city itself, we shall not examine minutely every street and alley in this metropolis of politics. We shall pause at the entrance, take a general view of the place, and wander at random.

The work comprises a preface, twenty-seven cantos of 'animali parlanti,' a supplemental canto, four distinct apologues, and a few notes illustrative of the text. No arguments are prefixed to the cantos: the subjects we now enumerate:—Debates among the animals on forms of government and the choice of a king-election of a despotic monarch, the lion-his court and regulations—court of the lioness—coronation—levee, paw-licking (our kissing hands), and public dinner—death of the lion regency of the lioness-education of the young lion-club in opposition to the queen-regent -wars among the animals -gallantry and licentiousness at the court of the lioness—alliances neutrality, and court-banqueting-negotiations-mythology, religious ceremonies - manifestoes - forced levies - marches of armies-defeats, battles-throne vacant-funereal rites of the second lion-mediations-deputies, conspiracies, general assemblies-deliberations and various opinions of quadrupeds, birds, and reptiles, on systems of liberty and manner of government and a conclusion of the work, by a convulsion of nature, which disperses the deliberating assembly.

By the subjects which we have particularised, with the preface, and supplemental canto before unfolded, our readers will be enabled to perceive that the poet has skimmed the whole region of politics, through every vicissitude of season. Before we terminate our remarks, we shall elucidate the manner in which his narrative is conducted, in a rapid progress through the first canto, to the election of the lion.

The 'poeta animalesco,' or bard of brutes, proposes for his subject 'the manners, usages, contentions, wars, and vicissitudes of animals, during their age of reason.' He invokes the zodiac, which had changed beasts into constellations, to illumine his verse. He then introduces us to a meeting of delegates from each species, duly accredited, at a solemn sitting, in-

which they proceed to examine synthetically and analytically every form of government:

6 — o buono o tristo, Repubblican, monarchico, o pur misto.'

Democracy—the aristocratic beasts concur with the author in condemning a mixed government, which they consider as hermaphroditic, and containing the seeds of its own destruction. Of a monarchy, and its divine origin, the poet himself thus speaks:

'Viene la carestia? vien la gragnuola? Chi vive in monarchia non muor d'inedia. Vengono guai? la monarchia consola. Manca danar? la monarchia rimedia. Del ciel sono i monarchi prediletti, Ei ne dirige opre, pensieri, e detti.

Prendi uom rozzo, fanne un monarca, Tosto il favor del ciel sopra gli piove; Tosto divien di sapienza un'arca; Nella testa di lui s'alloggia Giove. Decide, ordina, giudica: un oracolo Tutto a un tratto divien: pare un miracolo.'

Canto i. st. 17, 18,

Are seasons hard? comes hail, comes scant? In monarchies none die by want.

Come sorrows? monarchy relieves.

Fails money? monarchy retrieves.

Monarchs, of heaven the predilect,

As heaven ordains, think, speak, direct.

Take a mere dolt—make him a king, Soon heavenly favours round him spring; His head soon wisdom's ark contains; Jove dwells already in his brains. Decreeing, judging—not a blunder! An oracle at once—a wonder!

In these sentiments the animals agree with the poet. Whether the monarchy shall be absolute or regulated, elective or hereditary, is the only subject of debate. The powerful animals at first oppose a despotic monarchy, recommend distinctions of rank, and an upper and lower house—

' Divider in due camere, e in due classi, Gli alti animali e gli animali bassi.'

Some propose an elective monarchy: the majority inclines to absolute sway. At the head of the latter is a large, fierce, long-haired, black-muzzled, red-eyed, scowling, grumbling, barking,

impudent dog. Educated at college, he had acquired a fine elocution—

-gli uscian bei periodi di bocca.'

He had also collected various political scraps into the celebrated treatise, 'La Politica del Cane,' Dog's Politics. Although ambitious, yet too wise to aspire to the supreme dominion, he entertained a secret understanding with the lion, whom he engaged to support on a promise of being appointed prime minister. In a long harangue, he resists every regulation proposed to control the monarchy, as entirely chimerical. His speech is received with applause: but the fox remains very shrewdly observant of his manœuvres. The horse, undistinguished by any poetical description, apologises for differing in opinion from his friend the dog, but suggests that his arguments lead to slavery:—

' Sotto despota re, nulla tu sei, O sei solo ciò ch' ei vuol che tu sia.'

The dog, in reply, considers the horse too scrupulous, and supports his own judgement by the example of the sagacious bipeds, who usually prefer despots for their governors. This fact, he contends, ought to decide the debate. An old bear, however, who had escaped from his chains—a dancing bear, we conjecture—indignantly reproaches the dog for citing this authority, and requires a better precedent than that of the absurd bipeds. Some sarcasms pass between dog and bear; but the latter continues his speech in favour of absolute rule, and ends amidst acclamations—

'E i molti bravo alto gridavon bravo!' The many shouted, Bravo! Bravo!

A few muttered curses; but the grinnings and simperings of powerful animals the dog construed into approbation. The delegates now proceed to a poll, and examine minutely the merits of the respective candidates—a precaution which the poet greatly prefers to the usage among men of voting at hazard:

· - dare alla diavola il suffragio.'

The horse, who bears another on his back, and has no paws, tusks, or horns, is disqualified. The tiger is too cruel: a king should be merciful. The bear is at first a favourite with the democratic part of the meeting: but the dog, who rules the roast by his eloquence, describes him, though robust, as a blockhead and buffoon. Who would have a buffoon for king?—The bear retorts, but is excluded. The stag, notwithstanding his lofty antlers, is too cowardly. The bull is strong, but only qualified to rule over cows. The ass—'Ch' il crederia?' Who

would believe it?—proposes himself, boasting his long ears, his possente raglio,' and other merits; but is rejected with scorn. The mule is highly offended at the affront offered to his cousin, and makes a long speech in his favour, until cried down by—

- a basso il mulo, il mulo a basso.'

Other animals, absent on account of distance, or engagements, are proposed by agents and friends; as the tall giraffe, and the half-human ourang outang. The dog, however, predetermined, insists that sovereigns should be perfect brutes, or perfect men. Confusion of bipeds and quadrupeds would be a monstrous political corruption. Besides, he cites various authorities from the devil knows where '—d'onde tratte, il diavolo lo sà; perhaps from some pubblico dritto, lex non scripta, or common law of brutes, to prove that no animal can be chosen king, unless personally present. Of the dog's political information and legal knowledge, after his elevation to the office of minister—although he is supplanted by the fox during the regency—we give our readers an idea, by quoting the ninety-sixth stanza of the seventh canto:

'Questa, ed altre prammatiche, rescritti,
Leggi, dichiarazion, statuti, patti,
Decreti, avvisi, manifesti, editti,
Notificazion, proclami, e altri atti
D'autorità sovrana, ed usi varj
In pandette ridotti, ed in glossarj.'

Pragmatic sanctions, rescripts, acts, Laws, declarations, statutes, pacts, Notes, manifestoes, proclamations, Edicts, decrees, notifications; Each royal usage he collects, Framed into glosses and pandects.

The great majority of beasts now agree—the tiger and some others dissentient—that the competition shall rest between the elephant and the lion. The dog makes his panegyric on the lion, as a bold, majestic, and magnanimous brute; and calumniates the elephant, who, enraged, imprudently attacks the dog, and loses the election. The lion is proclaimed king; establishes his court in a cavern, amidst inaccessible mountains beyond the Ganges, overshadowed with trees and refreshed by streams, with two convenient little caves for his bed-chamber and cabinet, and a spacious adjoining apartment for the lioness. The dog assumes the office of prime minister; the business of state commences; distinctions of rank, orders of nobility, and numerous regulations, are established: and the story proceeds through the whole routine of politics, to a revolution, which terminates in

nothing, the assembly of revolutionists being dissolved, as we

have observed, by a convulsion of nature.

This political allegory of our aged poet, whose brutes record so many 'turns of fate below,' displays multifarious reading and observation, religious, physical, historical, and literary. His beasts, birds, and reptiles, speak and act as accurately in character as can be expected in such a drama. His versification flows with a familiarity and arch facility peculiar to the language of 'improvvisatori:' but the work is not rendered interesting by original conception, penetrating remark, or luxuriant imagery. Even in his separate apologues, he possesses no fascinations, as a fabulist, of power to seduce us from the grazia e leggiadria of La Fontaine, the elegant precision of Phædrus, or the unadorned sagacity of Æsop. His 'Animali Parlanti' may be sought to supply political hints, in regions where the maxim prevails that the temerity of journalists ought to be restrained—

'— la petulanza esser dovea repressa E la temerità de' gazzettieri.' Cant. xi.

They may amuse in France or in Italy; but in Britain, where political instruction yet flows from a free press, the discussions of bipeds will supersede these bestial authorities.

ART. VII.—Monumens Antiques inédits, ou nouvellement expliqués, Collection de Statues, Bas-rchiefs, Bustes, Peintures, Mosaïques, Gravures, Vases, Inscriptions, Médailles, et Instrumens, tirés des Collections Nationales et particulières, et accompagnés d'un Texte explicatif. Par A. L. Millin, Conservateur des Antiques, &c. de la Bibliothèque Nationale, &c. &c. 4to. Paris.

Millin's ancient Monuments inedited, or newly explained, &c.
Imported by De Boffe.

WE hasten to announce the first number of this interesting and elegant work, which is designed as a continuation of the collections of count Caylus, published at Paris 1756, in seven volumes quarto; and of Guattani, published at Rome, from the year 1784 to 1789, in six volumes of the same size. The numerous works of M. Millin in this department render him no unworthy follower of those distinguished antiquaries. The present undertaking is designed to be completed in six volumes, within four years; each volume, printed by Didot, will contain 400 pages of text, and at least forty plates, in six numbers. The number before us comprises sixty-eight pages, and nine plates.

France possesses many antiquities which have not yet been published; and if her late acquisitions (we have been accustomed to give them a harsher name) be considered, they must

Those in the possession of individuals be very numerous. may be injured or dispersed; and these M. Millin first describes. From the public collections, many ancient monuments have been engraven by Montfaucon, Caylus, Mariette, Morel, Vaillant, Pellerin, and Barthelemy. Many others however remain, which, as they are preserved with care, will be afterwards noticed. The engravings are peculiarly exact, and finished with more or less care, according to the nature and importance of the objects which they represent. Many are finely executed with the graver; others are done with aqua-fortis, or merely etched. Sometimes, in each plate, there is only a single subject, though small; sometimes there are two; but the plate, we perceive, is counted only as one. The explanations are more extensive than is designed for antiquaries alone; but M. Millin has been more diffuse, as his work, he trusts, will be more generally circulated: for the same reason he has translated the classical quotations, and the terms less commonly employed.

Archæology, or the science of antiquity, is divided into three branches;—numismatology, or the medallic science; palæography, or the science of inscriptions; and the monumental science, connected wholly with the art of drawing. In this collection there

are remains of each branch.

The present number contains, in seven dissertations, the explanations of different monuments, represented in nine plates.

We shortly notice the contents of each.

First, is the description of a cameo on a sardonyx, which represents the horses of Pelops; found in the cabinet of antiquities of the National Library, in the manuscript catalogue of which it is entitled 'The conquerors in the race.' This dissertation, if we recollect rightly, was published in the Encyclopedic Maga-

zine, of which M. Millin is the editor.

Secondly, The explanation of a bronze medal of Heraclium in the Tauric Chersonnesus (plate ii). This medal is important in a geographic and historic view, as it preserves the names of cities little known, and some traces of the customs of their inhabitants. The workmanship is coarse, and represents a bow and a club of a very peculiar form; which lead the author to some observations on the Scythians, who inhabited the northern part of the Tauric Chersonnesus where Heraclium stood. The Scythian bow, which Athenæus describes as resembling the ancient C, shares also his attention. The author supposes that 'this medal was struck previous to the time when the kings of the Bosporus fixed their residence at Panticapæa, or at least before the reign of Perisades I. the first king of the Bosporus whose coins have reached us; for the medals of Perisades were made by artists who had some idea of their profession. In the present coin we cannot trace even the first elements of drawing.

Thirdly, Description of a cinerary urn of a beautiful form, with an inscription, which shows it to be that of Cæsennia, mother of the Grapii. This urn was found in the beautiful collection of monuments and curiosities of Van Hoorn, member of the academies of Cortona and Cassel. M. Milling describes, very shortly, the customs of the Romans in the burial of their dead, and the ossilegium, or collection of the bones. He quotes the inscriptions in which Cæsennia is mentioned, though the name occurs in no work that we have been able to discover. He observes, also, that the ornaments of the urn, which consist of leaves of ivy and vines, show that the mother of the Grapii had been initiated into the mysteries.

In this work, M. Millin proposes to engrave and explain all the medals that have not been hitherto noticed in the national collection. The fourth dissertation is consequently confined to the description of four medals of Panticapæa, the most considerable city of the Tauric Chersonnesus. He first gives a short history of that city, then describes the medals, three of which have been hitherto inedited, and the fourth badly figured in the work of Pellerin. From the second, which presents a head with thick hair, crowned with ivy, compared with ancient monuments and the descriptions of authors, M. Millin points out the difference between the representations of Pan and Silenus, which have often been confounded. The head in question is that of Pan, the emblem of Panticapæa. Contrary to the opinion of Havercamp, he shows that the head on the medals of Vibius Pansa is that of Pan, not of Silenus.

The fifth dissertation treats of a Greek vase, adorned with a representation of the death of Actaon. The mythological questions which the different monuments suggest are examined with great precision; and the author quotes many dissertations of this kind, to show the advantages that have resulted from similar discussions, in illustration of questions of literature, of arts, and of remote antiquity. With respect to the fable of Actron, he explains the importance of hunting in the early periods of civilisation, and to what extent the memories of able hunters, who cleared the different countries from wild beasts, were honoured. He then engages in a more particular explanation of this fable, and points out the inaccuracy of some poets and different artists: the whole is finished by an enumeration and comparison of the monuments which represent this history. The vase belongs to M. Lenoir, who brought it from Italy; and it is represented in plates vi and vii.

The sixth dissertation treats of a silver medal of Pacatianus, figured in plate viii, and procured not long since. M. Millin collects the different opinions of medallists with respect to this emperor, whose name does not occur in any ancient author; and he explains how much his medals, first discovered in the

Pyrenees by father Chamillard, will teach us of his history. The medal is important, inasmuch as it fixes in the clearest manner the name of Pacatianus, and the æra of his reign. It establishes also the opinion of Chamillard, supported by Eckhell, though not founded on any ancient historic testimony. From all this, it appears highly probable that Pacatianus is only a surname; that the real names of the emperor were Titus Claudius Marinus Pacatianus; and that the medals which bear the two last names should be united, and placed between those of Philip II. and Trajan Decius. With respect to the different traits of the figure of Marinus Pacatianus, who is young and has frizzled hair; and those on the medals struck at Philippopolis with the legend ΘEΩ MAPINQ, which show the head of a bald old man, with a long aquiline nose, and so characteristic as to appear a portrait; M. Millin thinks that the two persons are different, though of the same family; that Marinus Pacatianus, crowned by the legions of Mœsia and Pannonia, lost about this time his father; and the inhabitants of Philippopolis, to testify their attachment to him, paid divine honours to the memory of the old man, as well as that of the emperors. The inscription was consequently confined to the Divine Marinus, without prænomen or cognomen. Whatever may become of the different conjectures formed on the subject of Pacatianus, this medal is of importance, as fixing the æra when T. C. M. Pacatianus was proclaimed emperor.

M. Michaux, on his return from Persia, brought with him a rounded marble, containing, on two sides, an inscription in Persepolitan characters, over which are figures of animals, &c. undoubtedly referable to the contents of the inscription. That monument, which is truly curious, and very different from all the Persepolitan monuments hitherto published, is at present in the cabinet of antiquities of the National Museum. The plates viii and ix give a faithful copy of the two sides of that marble. M. Millin, some time since, sent models or copies of the inscription to different antiquaries, who are now employed in deciphering it; particularly to MM. Munter, Herder, Ouseley, Hager, Henley *, and Silvester de Sacy. M. Millin has inserted in this number a faithful representation of that marble, to render

it more public.

In the seventh dissertation, M. Millin, after collecting the labours of learned antiquaries respecting the remains of Persepolis, endeavours to determine the species of animals repre-

^{*}We have been accidentally informed that the model destined for this gentleman was, together with some other literary communications from M. Millin, seised at the Custom-house, and (though repeatedly claimed, with the offer of paying any duty for it) sold, as UNREDEEMABLE. A bookseller, of the name of Baines, bought it, and packed it off to a customer at Liverpool.—The east was as perfect as the monumen titself.—Editor.

sented on this marble. He compares them with those found on other monuments; he introduces some remarks on the pyramidal sign, which is the base of the Persepolitan alphabet, and is placed on an altar; and concludes the whole by some observations on the kind of characters, and their position in the inscription.

Having had the good fortune to receive the second number of this interesting work while our account of the first was at press, we avail ourselves of the opportunity to announce its contents.

Accordingly, the eighth article consists of a dissertation on a disc in the Cabinet of Antiques, known under the name of The BUCKLER OF SCIPIO. This beautiful monument is of fine silver, and, weighing forty-two marks, measures twenty-six inches in diameter. It was found in 1656, by fishermen, in the Rhone, near Avignon, who broke its edges to ascertain the metal. Passing through the hands of a silversmith to those of an antiquary, M. de May, the injuries it had sustained were ingeniously repaired. The misfortunes of this possessor obliging him to part with it, P. de la Chaise bought it for the king. From Spon's explication it obtained the name of Scipio's Buckler. M. Millin, however, styles it the Disc of Achilles and Agameninon, and conjectures it to have been one of those discs which the Greeks called dioxos, Tivaxes, and the Romans lances and tympana. The new name is ascribed to it by M. Millin from his having determined the subject to be the bringing back of Briseis from Agamemnon to Achilles. The vessel itself he conjectures to have been a nuptial present to some young Roman, from his parents, who combined with their gift a moral lesson, from the example of the son of Thetis—not to indulge resentment. The Roman costume blended with the Greek, and the cast of the workmanship, architecture, &c. induce M. Millin to fix its date to the time of Septimius Severus.

with Gaulic inscriptions. On the principal face of one altar is inscribed ASTOILVNNO. DEO. C. FABIVS. LASCIVOS. V.S. L. M; which is, Avotive altar erected to the God Astoilunnus, by C. Fabius Lascives. As no other monument has been found of this divinity—excepting that at Tolouse a votive inscription is preserved HERCVLI.ILVNNO—M. Millin considers both as intending the same Gaulic divinity. The name Lascives, occurring in several other inscriptions, is considered as a surname in the Fabian family. The second altar, of marble also, is consecrated to the God Arardus: ARARDO. DAEO. I.P. F.V. S. L. M. Of this divinity no more is known than of the former. The addition of A in Daeo is considered as an error of the

sculptor. The letters I.P.F are supposed to stand for Julius Publii Filius.

After noticing some sacrific vases, and other vessels of unusual shapes, M. Millin points out a third marble altar, consecrated to the God Abellio, and bearing this inscription: ABLLIONI DERROC BORROCONEIVS. V.S.L.M. The first L is taken for E; and MARINI, Monumenti Arivali, p. 9. 161. 198, &c. exhibiting instances of the like substitution, the reading ABELIONI is considered as certain; especially as the God Abellio is known from other monuments found in the territory of Cominges, called, when Gaul was subject to the Romans, Convenæ. Scaliger and Gruter have preserved many of these incriptions. Vossius, Struvius, Scaliger, and most critics, regard Abellio as the Apollo of the Greeks, the Sun, whom the Cretans styled AGEALOV, and the Pamphylians, whatever appertained to this luminary, Agehios and Agehins. Apollo is conjectured to have been called among the Convena, Abellio; as he was styled in other parts of Gaul, Belenus and Belinus; and at Aquileia, Belus: all which names are formed from the Hebrew Bel, or Bal, the Sun.

This inscription is noticed as the fourth consecrated to Abellio, but it supplies no information concerning his worship. As the word DERROC is unintelligible, M. Millin is induced to separate DER from the rest, and for the first R to substitute (that letter being ill-formed) O; thus reading ABELIONI DEO. As to the other three, the two first being very legible, and the third appearing to be C, it is proposed to consider them as an abbreviation of the name ROCius, which occurs in other inscriptions referred to in Muratori LXVIII. 8. and Gruter CDXXXVII. 3. and was probably intended for Roscius; whence it is inferred that Rocius Borroconeius, who might have been descended from the family Roscia, or else been a freed-

man of it, consecrated this altar to the God Abellio.

V.S.L.M, which terminate these three inscriptions, are considered as the initials of Votum. Solvit. Libens. Merito.

To these observations, conjectures are subjoined on a marble

bearing the name of Marcus Severus.

The tenth number contains the description of an ancient sarcophagus in the Boutin garden, known by the name of Tivoli.

After a research into the origin, name, and application of sarcophagi in general, abounding with curious and learned authorities, M. Millin describes the one here referred to, as exhibiting
the bust of a young man placed before a piece of tapestry, and
holding in his hand a scroll: beneath the bust are baskets overturned; on either side winged genii, holding garlands of flowers
and fruits; above these, masks, fronting each other, and separated by a thyrsus. Under the garlands are also baskets overturned, with birds pecking at the fruit.

The bust itself deserves particular attention; for, being crowned with laurel, and holding a scroll, it evidently characterises a poet; while the masks and garlands indicate his works to have been of the pastoral, georgic, and satirical kind; or perhaps of the comic.

The circumstance of the hand deserves notice, as it seldom

occurs in ancient busts, and much less in sarcophagi.

The poet is dressed like a Greek, in a tunic or pallium; his right hand is covered, and he appears reciting. The Greeks, and especially the Athenians, in this manner wore their mantles. The circumstance of the crown is supposed to indicate not only

a poet, but one who had excelled his competitors.

M. Millin ingeniously observes, that tablets (pugillares) would have been more consistent with the character exhibited than the scroll, if intended to represent the moment of composition, and refers to the muse Calliope in the Museum of Arts; but here the roll is adopted to intimate that the verses finished on the tablets were transferred to it.

The drapery suspended by large knots behind the bust was that which served as tapestry for the interior of apartments,

and for that reason was called peripetasma.

The four genii holding the garlands are Bacchic, which are seen on other monuments performing a similar office; but here more immediately belong to the comedy or satire of the poet. These garlands are formed of bay-leaves and berries, having in the midst a flower of five petals; above each garland are masks separated by a thyrsus: on the right of the bust, Pan is distinguishable, as opposed to Acratus or Ampelus—not Faunus, as the work is in the Greek style; on the left, the first mask is Silenus, confronted with Bacchus.

M. Millin refers to other monuments of similar designation. A valuable one of this kind, with a Greek inscription, was acquired by Mr. Townley from lord Besborough's collection. It is hoped that the public will shortly know more concerning it.

The eleventh number exhibits an Egyptian head in cameo, from the collection of count Caylus, now in the National Library. Having been engraven in so incorrect a manner as to leave the sex of the representation uncertain, it is here more faithfully given, and particularly as exhibiting that style of imitation in which the taste and costume of Egyptian works were copied by the Greeks and Romans. M. Millin judges the stone in question to have been executed in Egypt, under the Greek kings, by an Egyptian artist, formed in the Greek school. He gives it as probable that the subject is the portrait of an aged woman much devoted to the worship of Isis, and who wished to be exhibited in the appropriate Egyptian dress. The age of the face represented he considers as incompatible with the figures of Isis—forgetting, however, the celebrated passage in

Plutarch expressive of her great antiquity:—'hor', says he, 'can this be called the head of an Egyptian priestess, because the ancient Egyptians had none; for,' adds he, 'if any indications of priestesses exist, they belong to the time when the Egyptian worship was perverted in Italy.' How far this assertion is reconcilable with the mention of priestesses in the inscription on the stone from Rosetta, (see p. 526 of this Appendix) it remains for M. Millin to adjust.

The subject of the twelfth number is a painting on a Greek vase, which represents a washing of hands. As ablution was a rite of initiation, and also a ceremony that preceded marriage, this little vase is considered as a present to a young female, either upon one or the other of these occasions. The figures, though not correctly drawn, are pleasing; but that of the young female

at the bath is much more simple than the other.

We hope in our next Appendix to notice the further success of this work.

ART. VIII.—Histoire naturelle, générale, et particulière, par Le Clerc de Buffon. Nouvelle Edition, accompagnée de Notes par C. S. Sonnini. Paris.

The Natural History, both general and particular, of Buffon. New Edition, with Notes, by C. S. Sonnini.

WE have already announced this edition of Buffon's Natural History, and propose at present to speak of its progress and some of the more important additions. It will be recollected that M. Sonnini designs to insert the supplements in their proper places, to add an account of the quadrupeds and birds discovered since the author's publication, and to extend his work to reptiles, fishes, insects, worms, and the history of plants. We

have received forty-four volumes of this work.

We formerly observed that the sixteenth volume, (for so far had our former account reached) containing the charts and declinations of the magnetic needle, was delayed for the purpose of adding the observations of La Pérouse and Labillardière. It has now appeared, with the continuation of the mineralogy. M. Sonnini may say, with Linnæus, Lithologia mihi non cristas eriget; and he has called in the able assistance of M. de la Metherie: but, on the whole, we think the additions very imperfectly executed. The alluvial theory of this latter author is added, and an abstract of mineralogy, according to the modern discoveries, inserted; but, upon the whole, it is too concise, and too general for a laboured work of this kind, professing to embrace the entire scope of natural history.

The history of animals is greatly improved by the numerous and valuable additions of Sonnini, Latreille, Virey, &c. Sonnini has made many considerable ones to the articles of tiger, conguar, puma. He has added a description of the booted lynx from Bruce. Latreille has given an account of the black panther in the Tower, and greatly augmented the articles hyæna, rhinoceros, and mole. Virey and Sonnini have added to the account of the elephant, and the latter to the fennec. To the history of the buffalo, Sonnini has made considerable additions, and shown that it is distinct from the ox, and that, though they live together, they never copulate. The yak, or the buffalo with the horse's tail, is described from Pallas: it has been already noticed in our review of the Embassy to Thibet. Sonnini informs us that there are three races of zebu, distinguished by their size. From professor Allamand are derived some valuable additions to the articles of tapir and rein-deer. He has described also the gazelle with a cavity on his back, brought from the Cape of Good Hope by captain Gordon; and the gnou, a ruminant animal of the size of an ass, from the extremity of Africa. The hucque and the guemul of Chili resemble the lama, and have been confounded with it, but are distinguished by Sonnini. The sloth-bear and the megatherium are now well known. Various smaller animals from Chili are described by Sonnini, and several by M. Pallas, which are too numerous to mention particularly. Some of the animals described from Pallas are called flying-cats, because they have wings like bats, though they greatly differ from this genus. The calago, an animal which connects the makis and the jerboas, is described by Sonnini as well as Viscaque; it resembles the fox as much as it does the rabbit. Several phocæ are inserted from the descriptions of Molina. The platypus, or ornithoronchus, is noticed under the name of bec-d'oiseau.

The thirty-fourth volume is concluded by a methodical arrangement of the quadrupeds by Latreille, who has greatly profited by the labours of Cuvier and La Cépède.

The thirty-fifth and thirty-sixth volumes contain the history of apes. Latreille has made many additions to the text of Buffon. 'The fellow-labourer,' says he, 'of the learned and respectable Sonnini, so worthy to become the editor of the works of the French Pliny, who honoured him with his friend-ship, and communicated to him so many valuable remarks, having been entrusted with that part which relates to apes, I have concentrated all my powers to justify his confidence, and endeavoured to render the history of these animals, published by Buffon, as complete as possible.' Latreille seems to have collected from the most approved works and the most respectable travelers. Those of Audibert, Cuvier, Geoffroy, and La Cépède,

have been of the greatest service to him: he has added considerably to the article of the orang-outang—a species of ape peculiarly interesting, by the strong relation it bears to man. He shows, however, that it differs very widely: and concludes that the orang-outangs, though more resembling man than the other apes, have yet an organisation that separates them at a considerable distance from us, and places them with other animals.

The differences pointed out are, first, that the occipital foramen is farther back than ours; so that, when placed on the hinder feet, the head is not balanced. Their eyes are, in that situation, turned upward, and they only look directly forward when the animal is placed on four feet. 2. The pelvis has the plane of its aperture parallel to the spine; and so strait, says Cuvier, that it cannot furnish a sufficient base, nor equal attachments to the trunk—consequently, the body cannot remain in a perpendicular situation. 3. The hind feet do not rest on the whole plane, but only on the external edge, presenting in consequence no point of support. We see therefore, by their conformation, that nature has formed them to climb with ease. 4. The hollow of the thigh bone, in which the patella moves when we extend the leg, is so short, the flexor muscles are inserted so low, that the orang-outang remains constantly with its knees half bent. 5. The larynx cannot articulate any sound, as the air fills two considerable cavities placed in front of the neck, and communicating with the trachea before it passes through the glottis. 6. The thumb is so short that it cannot be of any use. 7. The maxillary bone, as in all the mammalia, except man, is divided by a suture between the canine tooth and the last of the incisors, so that these are all fixed in the intermaxillary bone.

Latreille has also made considerable additions to the natural history of the gibbon. He has given the history of the ape of Warmb, described in the Journal de Physique of 1798; and introduced the black ape spoken of by Vaillant, as well as the rhesus of Audibert. Various additions of less importance we have observed, which would detain us too long were we to dwell upon them; and this last genus of the mammalia is concluded by a table of every species of ape hitherto known.

The thirty-seventh volume begins with the history of birds, in which we find very copious and important additions to the text of Buffon. The general history of birds has been greatly augmented by Virey; and the rest of the volume treats of the eagles. Sonnini has added to the history of the common eagle, and described many new species (at least ten) unknown to Buffon.

The thirty-eighth and thirty-ninth volumes contain descriptions of the other carnivorous birds of the same family, in which the additions by Virey and Sonnini are very numerous.

In the fortieth volume is an account of the nocturnal birds of prey; and it concludes with those which cannot fly; viz. the ostrich, the cassowary, the solitary, &c.—In these articles we

trace numerous additions by the same hands.

The forty-first and forty-second volumes contain the bustards, turkeys, and the rest of the gallinaceous tribe; the forty-third, the quails, the pigeons, and turtles, with the continuation of the partridges; the forty-fourth, the crows, the pies, the jays, the rolliers, and the birds of Paradise.—We perceive chiefly the additions of Virey in the forty-third, and of Sonnini in the forty-fourth volume: they are numerous and important.

In the forty-fifth, Sonnini describes several of the birds of Paradise which Buffon had not seen; and the history of the stares follows.—We next find that of the trompiales (icteri), with a variety of new species; of the merulæ, included by Linnæus with the thrushes, the blackbirds, and ouzels of this country; to which many new species are added. And this little

race fills the whole of the forty-sixth volume.

The forty-seventh contains the grosbeaks; to which Virey, one of our editor's fellow-labourers, has added many new species. Sonnini contributes to our knowledge of the Canary-birds, sparrows, &c. by many novelties. The forty-eighth volume contains the new species of finches, tanagres, siskins, &c.—In the forty-ninth are the ortolans, &c. communicated by Sonnini; and, in the fiftieth, some new species of agomi (psophia L.), the trumpeter, with various corrections, by the same author. In this volume, Virey describes many new species of the fly-catcher, and Sonnini communicates some new observations respecting the larks.

The fifty-first volume contains the sequel of the history of the larks by Sonnini, and of the beccaficos by Virey. The figuiers, the warblers, are described by the same author in the fifty-second volume; and the remaining birds (for the list would be endless) in the subsequent ones. The sixtieth is the last which has reached us on the subject of ornithology; and it is concluded by a memoir of J. C. Lapierre, on the laying of birds, and their incubation. This essay contains some curious remarks, which we cannot at this time enlarge on. The subject

will again occur to us very soon.

The birds and minerals were the last parts of natural history which occupied the attention of Buffon; but modern discoveries have greatly added to the other branches with which that celebrated naturalist was imperfectly acquainted. It is the object of Sonnini, as we have already remarked, to supply his defects; and we shall now announce, as we have room for a little more, the works which have been published with this view.

The first, in the order of publication, is the general and particular history of the reptiles. In an introduction of 300 pages, the author, M. Daudin, gives a general description of reptiles, and afterwards treats of them in a philosophical view, describing their more important organs and their principal functions. This part of the work is peculiarly interesting, as the relations of this class of animals to the rest of the animal kingdom are clearly pointed out. The first volume contains the methodical arrangement of these animals by Klein, Laurenti, Scopoli, and Linnæus, with the corrections of Gmelin, La Cépède, Brogniart, and Latreille. In the second volume we find a description of the tortoises, the crocodiles, the caymans, and

the dragons.

The two first volumes of the moluscæ, or animals without vertebræ, and whose circulating fluid is white, have also appeared. M. Montfort begins with general observations, and is led by them to a short theory of the earth—but too incomplete to admit of any analysis or criticism: he has promised to publish it at greater length. He then proceeds to the coriaceous moluscæ, to the cuttle-fish (sepia), the ink-fish (loligo), and the polypi. Under the latter head, he speaks of the monstrous polypi mentioned by Pliny; and we have noticed in our journal—if we mistake not, from the observations of Spallanzani some account of polypi so large, as to lead to a suspicion that swimmers may be sometimes drowned by being entangled in their spreading antennæ. This, however, is a pygmy to that mentioned by Pliny, who tells us that in the Great Ocean (the Atlantic) there are fishes whose antennæ are so widely spread, that they cannot pass the Straits of Gibraltar, and that they sometimes attack ships with a design to sink them. M. Montfort, who should have been superior to these idle tales, speaks, from the report of a captain from St. Malo, of a ship being attacked by one of these monsters, which however failed in The kraken of Pontoppidan is again revived; but sinking it. this old story evidently arose from some submarine elevation, which formed a shallow of little comparative extent-as will be evident from perusing the good prelate's narrative, who was himself misled.

Two volumes of the natural history of crustacea and insects have also been published. These are the works of Latreille; for, as in the volumes on reptiles and moluscæ, M. Sonnini is the editor only. These volumes are introductory, and contain some curious details on their instincts and manner of living. The latter affords, to those who have patience to observe it, some curious and striking facts.

The author next describes the means of taking and preserving insects, and adds some very just remarks on the nomenclature of

colours, as relating to entomology.

In the second volume he treats of the external and internal organisation of insects, as well as their mode of reproduction. The volume concludes with an explanation of the different entomological systems, particularly those of Geoffroy, Schæffer, Fabricius, Olivier, Cuvier, Lamarck, and Dumeril; as well as his own. We shall of course return to these volumes, when more complete. We may however add, that there is lately published at Paris a descriptive account of Réaumur's Memoirs on Insects, by which the reader can easily refer to any particular subject in his collection.

ART. IX.—Annales de Chymie. Tomes XXXVIII et XXXIX.
Paris.

Annals of Chemistry. (Continued from Vol. XXXIV. p. 510.)

THE contents of these volumes furnish no subject of introductory remark; so that we shall pursue the different articles in their order, omitting, as usual, the accounts of English works, or English discoveries, that have been published in our own language. We may however observe, to avoid interruption, that the continuation of the Inquiries on the Laws of Affinity, and the conclusion of the examination of the Dutch memoir on the Change of Aqueous Vapour into Air, occur in the 38th volume.

The report of MM. Guyton and Vauquelin respecting M. Thenard's 'Memoir on the Combination of the Tartareous Acid with Salifiable Bases, as well as the Properties of the Salts resulting from this Combination,' demands our attention. It relates to the triple combinations of which this acid is susceptible in many well known substances, as the sel de seignette, Though M. Thenard has martial tartar, and emetic tartar. greatly added to our knowledge in this respect, the minute detail of a report is incapable of abridgement. It appears, however, that many of the tartrites are susceptible of further combination, and that these triple salts have peculiar properties. Some have for their basis two alkalis; others an alkali and an earth, an alkali and a metal, or an earth and a metal. of these bases, which are separated by alkalis from their simple combinations with tartareous acid, no longer admit of separation, when united in the triple salt. A variety of important and accurate analyses of substances used in the arts and in medicine are added; of which it is of consequence to know the proportion of the component parts.

The abstract of a memoir, by M. Lehof, on Galvanism, has, from the period of its communication, lost somewhat of its no-

velty, though it is in many respects valuable. The existence of a fluid current has not been demonstrated, and its direction is still more uncertain. The object of this memoir, therefore, is to prove not only the existence of a very subtile fluid in the Galvanic chain, but, in the application of different chains to animal arches, very unequivocal marks of its direction: it is to demonstrate, that, by the assistance of some general rules, we can determine, a priori, in a great number of different chains, the direction of the current; and, reciprocally, that, the direction and nature of the parts of the chain being given, it is possible to determine, at least in certain cases, their respective positions; and by the interposition of new bodies in the chain, or some change in the disposition of the parts which compose it, to direct the Galvanic fluid at pleasure, or reduce it to a state of rest. The knowledge of these phænomena depends on a singular fact—that the Galvanic fluid, in its passage, is accumulated at the parts where the armature is applied; and from the same fact we can ascertain, at small distances, the nature of the metals, by what may be styled their Galvanic affinity.—We are sorry that we cannot give a fuller account of this memoir, which is expanded into a variety of physiological and philosophi-We may just remark, however, that the passage of this fluid through the nerves is seemingly not equally easy; and that it moves more freely from their extremities to their roots than in the opposite direction. This, nevertheless, may be partly owing to the defence of their coats; for, in the extremities, these involucra are lost. Another circumstance, which we ought to notice, is the order in which the Galvanic fluid is contained, or capable of being accumulated in different substances. It is in the least quantity in zinc, and successively increases in lead, tin, mercury, bismuth, copper, silver, and plumbago. Each succeeding metal consequently loses a portion of the Galvanic fluid when in contact with that which precedes it.

M. Dabit communicates some Reflexions on the Difference of the Acetous and Acetic Acids. Our readers may recollect that this subject has occasioned some discussion. M. Adet concluded, from his experiments, that there is no difference, except in the quantity of water—the acetic acid being most concentrated: yet to this our author offers some striking objections, particularly the pungent smell and taste of the acetic acid, which are not destroyed by dilution; and its immediate action on copper, which the acetous acid only dissolves, when oxydated. M. Chaptal supposes that the difference consists in the acetic acid possessing a smaller proportion of carbone. Our author, from several experiments, appears to have proved that the acetic acid has a larger proportion of oxygen, and that with pot-ash it is really in the state of acetous acid; but that

It obtains its additional oxygen from the sulphuric acid, by

means of which it is separated.

An abstract of a work of Lampadius follows. It is entitled, Essays, in the small and the great Way, on the Means of extracting Sugar from the White Beet, with theoretical and practical Considerations on this Subject.' This work is in German, but has been translated into French, though the translation is, we believe, not yet published. The abstract is taken from the translation, but is too full of detail, and not sufficiently interesting

to detain us.

M. Pissis' 'Experiments on the Ashes of some Woods' were suggested by observing that those of the poplar-tree formed a frit—an imperfect vitrification. He finds the ashes of the white poplar more abundant in salts than those of the oak, contrary to the generally received opinion, that the hardest woods contain the largest proportion of pot-ash. The other species of poplar greatly differ in the proportion of saline matter they furnish, which, in our author's opinion, seems to make an objection to the common dogma, that plants of the same species agree in their medical virtue. The latter however is very remotely connected with the chemical analysis. The rotten wood affords more ashes than the sound. The hydrogen seems to be dissipated, and the carbone to be separated in combustion. This only holds, however, when the rotten wood has not been percolated by water. In re-fusing the ashes, a part of the weight is lost; but this arises from the loss of carbonic acid; for the ashes gain in value as they are more rich in salt; and when they form a frit, this must be pounded, previous to the lixiviation; since water will not otherwise extract the saline matter.

M. Guyton's 'Report of the Mechanical Lamp of MM. Carcel and Carreau.' This is an improvement of Argand's lamp. The light of the lamp is more than equal to that of eleven candles; but we cannot appreciate its value, as the description is not illustrated by a plate. The report is wholly in its favour; and the oil appears to be raised by a piston, set in motion

by a spring.

M. Proust's 'Experiments on Platina' will not admit of abridgement; and we less regret our inability in this respect, as the experiments have appeared in our language—we believe,

in the Philosophical Magazine.

'Account of an Oil extracted from the Cornus Sanguinea of Linnæus, by M. Margueron.' This oil is desiccative—prepared from the berries by expression—and belongs to the second class, as distinguished by Fourcroy. It is a real oil, and burns with freedom; and has no unpleasing odor or taste, when used as food.

M. Dubui has communicated some observations on Opium

and its composition, followed by different processes to obtain it from the white poppy (the papaver somniferum). It is singular, that, in this inquiry, which is apparently extensive, he should have been unacquainted with the Amœnitates Exoticæ of Koempfer, who gives very ample information on the subject. From his experiments, it appears that the opium usually imported is not the genuine extract of the stalks, leaves, or the green heads of the white poppy; for it is contaminated with many impurities; and would not, if pure, exhale the nauseous smell so distinguishable in it while moist. For the same reasons, it is not the inspissated juice of a decoction of poppyheads. Those from Egypt are not apparently different from the poppy-heads of France. He concludes, from his experiments, that the opium of the East is the dry extract of every species of white poppy, taken from the earliest period of their flowering to that of their maturity; then mixed, and reduced to a proper consistence with the stinking mass arising from the stalks, leaves, and green capsules of the same poppies, bruised and fermented to the point necessary to develop the nauseous smell. There is however a kind of opium, in tears or globules, which exudes from the heads of those poppies which are nearer to the globular than the conoid form. This last kind is almost wholly soluble in water, more pure, less bitter and acrid to the taste, and less nauseous to the smell.

A Description of the different Manufactures, either of Amalgamation or Foundery, used in the Manufactory of Halsbruck, near Freyburg, by J. P. Fragoso.' This little manual is intended for the use of visitors and students: the abstract is communicated by M. Bouillon la Grange, but is incapable of abridgement, and would also be unintelligible without the

plates.

An abstract of Dumas's Principles of Physiology follows—a work we have long had in our hands, but do not find suffi-

ciently interesting to form an article in our journal.

A very satisfactory memoir, 'on the Acid Waters which result from the Manufacture of Starch,' by M. Vauquelin, next occurs. The acid is in so large a quantity, that it seemed to merit notice; and it appears to be the effect of some degree of fermentation. This fluid contains the acetous acid, ammonia, phosphat of lime, an animal substance, and alcohol. The fermentation of the farinaceous matter produces the alcohol and the acid. The ammonia is derived from the decomposition of the gluten or animal matter of the farina; and the phosphat of lime existed originally in the flour. It is apparently suspended in a minute division, or dissolved by means of the acid. The loss of starch in the preparation is considerable; but it is indispensable; for, without the formation of the acid, the

gluten would not be separated; and the starch would neither be so white, nor crackle under the fingers, when bruised *. Perhaps the acid may be useful in manufactures or chemical processes; but on these points M. Vauquelin is unable to decide, as he is not acquainted with the comparative value of vinegar, or of the refuse of the starch employed in feeding hogs.—M. Deyeux, in a note subjoined, communicates the analyses of the same waters, by MM. Le Sage and Parmentier. These are not, however, so complete or satisfactory as the analyses of Vauquelin; but he adds, that, according to the grain or water employed, the acid fluid contains some addi-

tional ingredients.

Mr. Woodhouse has published some observations on the objections of Dr. Priestley to the Antiphlogistic System, in the Medical Repository, an American collection. These, and some remarks in a separate publication, are abridged in the present volume; and, on the whole, we perceive that this chemist, though in favour of the doctrine of Lavoisier, finds some of Dr. Priestley's objections correct. In these experiments, however,-viz. in that where zinc was reduced by carbone,—a new gas was discovered, which burns, when lighted, in common air; detonates, though feebly, with oxygenous gas, and requires a large quantity of it. It is lighter than carbonic acid gas, and heavier than carbonated hydrogen—the weight being nearly that of atmospheric air. When inflamed over oil or mercury, it affords no water; and it then leaves carbonic acid air in perfect purity. The same gas is obtained by treating oxyd of zinc with plumbago, and exposing carbonate of barytes with pulverised charcoal to the fire. Charcoal, in a porcelain tube, heated red, will produce the same air, if carbonic acid gas be repeatedly passed through it. This is therefore an oxydated gas of carbone.

To prevent any interruption, we shall pursue the same sub-

ject as treated in the thirty-ninth volume.

M. Guyton read to the National Institute a memoir on the Combustion of the Oxydated Gas of Carbone without Heat. He found that the carbone was in a very different state from that in which it forms the carbonic acid and hydrogenated carbonic gas; and is not in a condition to act on a solution of metals the most easily reducible. It may, he found, be in part burnt by the oxygen of the oxygenated muriatic acid, and then acquires all the properties of the carbonic acid; but this combustion operates only gradually, as if the affinity were chiefly determined by the mass of oxygen in action; and, in reality, it is only reduced to carbonic acid by operating repeatedly on the same gas. MM. Desormes and Clement have,

^{*} Might not an acetous acid be added?-REY.

however, elucidated the subject more completely, in a memoir on the Reduction of the White Oxyd of Zinc by Charcoal, and on the Oxydated Gas of Carbone which results from it. Their experiments are varied and minute; but we cannot follow them closely. They have clearly proved the existence of an aërial oxyd of carbone, whose proportions of carbone vary from 46 to 52 parts in 100, according to the quantity of charcoal employed, and the temperature at which the mixture is made. It is singular that this gas cannot be produced directly by uniting the given quantities of carbone and oxygen, and that it is only formed by adding carbone to carbonic acid. They in vain attempted to form it by suffering oxygen to pass slowly over red-hot charcoal: the result was only carbonic acid, unless it remained long in contact with the carbone. A striking experiment was that in which the hydrogen decomposes the carbonated gas by taking away its oxygen. The abundance of the former principle is perhaps necessary to the decomposition, and is analogous to that of the carbonic acid with phosphorus, where the greatest affinity is determined by the largest mass. Its action on vegetable and animal substances they determine to examine at some length. This part of their labours is not, however, yet published. To return to the thirty-eighth volume-

M. Thenard's process for purifying the Oil of Colsa will

not admit of abridgement.

M. Lunel's memoir 'on the Distilled Waters of some Plants, called Inodorous,' merits particular attention, in a pharmaceutical, rather than a medical, view. He contends that the distilled water of plants, without smell, is by no means on a footing with simple water in its purest state; and thinks that, as in mineral waters, the minute division of the impregnation may add to its medicinal powers. These are to be obtained by adapting the degree of heat, and the quantity of water, to the different plants, according to their nature; but he gives no directions for this purpose, according to the different qualities of plants.

M. O. Reineche's 'Observations on the Means of discovering the Presence of Lead in Wine' afford an useful example of this kind of analysis. The wine in question did not con-

tain an atom of the metal.

M. Crell's miscellaneous Letter affords nothing very interesting, except an account of a mineral found in Cornwall—called, by a ludicrous mistake, Cornwallis. It occurred in steatite, and was in powder or in irregular masses; of a yellow colour externally, internally of a shining white; thin and brittle between the fingers. It is a mixture of several metals; but zinc is in the largest proportion. It contains also a large proportion of sulphuric acid, as well as of water of crystallisation.

The 'Memoir on the Culture of the Sweet Beet in France' offers nothing very interesting. We find that M. Adam of Rouen has made a considerable improvement in the process of distillation. He draws at once the most rectified spirit, at five sixths of the expense, without its having any bad taste or smell, though extracted immediately from the lees.

The first article in the thirty-ninth volume is entitled 'Observations on the Action of Sulphat of Iron on Nitrous Gas.' This refers to a former memoir in the Ægyptian Transactions, noticed in this journal—the conclusions of which were disputed by M. Humboldt, assisted by M. Vauquelin. Berthollet is willing to appeal to the latter, as his judge. We cannot engage in this controversy, which hinges on the point, Whether the azote that remains after the absorption of nitrous gas, be a part of that gas, or the effect of the action of the sulphat of iron? We must add, however, that the traces of the muriatic acid discovered by this author, and mentioned in the same memoir, proceeded from the filings of steel employed, and were owing to an accidental impregnation.

A Memoir on the Magnesian Earth, known by the Name of Earth of Salinelle, or Sommières.' The author's profession is the manufacture of alum; and his object is of course to discover clays peculiarly rich in alumine, and nearest to his manufactory. The earth in question is magnesian, and has the same relation to magnesia which clays have to alumine. It may be styled a true magnesian earth, though, as in clays, the flint is the predominating ingredient. The proportion of magnesia is 0.22; and the earth is employed by our author in making the sulphat of magnesia (Epsom salt).

An abstract of M. Guyton's 'Treatise on the Means of purifying Air, preventing Contagions, and checking their Progress, by M. Deyeux, follows. The author used the fumes of muriatic acid; but he gives also an account of the employment of the other mineral acids. He then examines the subject chemically, and takes, as his example, the air from putrefied beef. We may observe, however, that this is by no means a fair example; as putrefying vegetables and a marshy soil are the more common causes of putrid diseases; and, where they arise from the animal kingdom, it is from the confined effluvia of a human body, not in itself putrid. M. Guyton found, in the putrid effluvia just mentioned, that carbonic acid gas was in a larger proportion than atmospheric air; but the effects were not owing to this gas, as, after its separation, there was a similar odor. No separate ammonia was discoverable. In the eudiometer, this putrid air was not found to contain less oxygen than common air. With respect, however, to the nature of these emanations, even bis chemical knowledge could obtain no satisfactory information; and his attention was next directed to the

means of separating or decomposing them. Cold water, lime, resinous and aromatic bodies, fires, the explosion of gunpowder, and the 'vinegar of the four thieves,' had no effect in destroying the fætor of these effluvia. Vinegar was successful, but only after copiously and repeatedly washing them with it. The acetic acid had a very rapid and powerful effect; but the expense prevents its general use. The sulphuric acid is not sufficiently volatile; and the nitrous acid, though powerful in correcting the fœtor, is inconvenient, as, when raised in vapour, it always contains nitrous gas, which is injurious to the health of those who breathe it. The muriatic acid, particularly the oxygenated muriatic acid, was equally convenient and powerful, and, in our author's opinion, merits the preference. This leads our author to speak of oxygenated remedies, as preventives or cures of infection. He would extend them to hydrophobia, itch, and the plague; as he thinks they have already been shown by Mr. Cruickshank to destroy the infection of the small-pox, and the syphilitic poison by others. M. Guyton, however, is no physician.

MM. Fourcroy, Vauquelin, and Thenard, have been employed in Galvanic experiments. By augmenting the diameters of the discs, they found the commotions and the decomposition of water not augmented or accelerated; but the combustion of metallic wires was immediately affected, and in oxygen gas the combustion was rapid with a brilliant light. Combustion is therefore in the ratio of the diameter of the plates; the other

phænomena, in that of their number.

A Gummy Substance has been discovered in the Root of the Hyacinthus non scriptus. It appears to be a pure gum, and may be extracted, in M. Leroux's opinion, with advantage. Since that time the author has converted it, we find, into an amylaceous matter, and in the fortieth volume gives a fuller account of this substance. The root is richest at the period previous to its caulescence; and the author explains at length the manner of collecting the fluid gum. He found the substance soluble in double its weight of cold water; but in a smaller quantity of warm water, to which it gives a lentor like-gum. It is not easily powdered, and on burning coals exhales the odor of syrup. The coal is light, and the ashes contains a small proportion of lime. When distilled, it affords the pyromucic acid in large quantities. It is not dissolved by alcohol, is blackened by sulphuric acid, with the mixture which exhales a sensible odor of acetous acid. The nitrous acid converts it into oxalic; the muriatic and acetous acids scarcely change it.

It is singular that, in coagulating, it becomes white, and assumes an amylaceous nature; in general, indeed, a mucilaginous state precedes the amylaceous. The author found this gum, when the amylaceous change was less conspicuous,

useful in a variety of manufactures, particularly in calico-printing, hat-making, ink-making, &c.

As our article has extended beyond our expectations, we must defer the remainder of the volume to another opportunity.

ART. X. — Médecine Légale et Police Médicale de P. A. O. Mahon, Professeur de Médecine Légale, &c. Avec des Notes du C. Fautrel, ancien Officier de Santé des Armées. Paris.

Forensic Medicine and Medical Jurisprudence. By P. A. O. Mahon, Professor of Forensic Medicine. With Notes by C. Fautrel, a Senior Officer of Health to the Armies. 3 Vols. 8vo. Imported by De Boffe.

THE different constitution of the criminal tribunals of England and the nations on the continent have made forensic medicine (médecine légale) a subject of much greater importance in other countries than our own. In England, the questions submitted to the medical men are few and general: unfortunately, their evidence has been proportionally inconsiderate and unsatisfactory; nor have many important points been submitted to their decision, where we can compliment them for their judgement or their discrimination. This branch of medical education has indeed been much neglected—though we apprehend it has lately made a part of Duncan's course; and the publications on this subject have been very few and unsatisfactory, including only, in general terms, the signs of pregnancy, effects of poisons, and the doubtful marks of a child having breathed from an examination of the lungs. If with these trifling works (trifling in every sense of the word) we compare the publications on the continent, the contrast will be considerable; though, as we have already remarked, the practice of the criminal courts greatly varies, and may occasion the difference. A few only of the more important publications, as they occur to us, we will mention; viz. Ludwig Institutiones Medicinæ Forensis; Meyer Institutiones Medico-Legales; Alberti Systema Jurisprudentiæ Medicæ; and Hebenstreit Anthropologia Forensis. many others of a later date, which, not to swell the catalogue, we shall omit; but we must mention an excellent collection of separate dissertations on this subject in six volumes, published from 1785 to 1790, by J. C. T. Schlegel at Leipsic. Many of these are inaugural dissertations, which, as we have had occasion to observe, are on the continent the works of the respective professors. We may, in addition to our remarks on the importance of this subject in other countries, add, from the title of the work before us, that it is taught by a distinct professor; and, had we transcribed all Dr. Mahon's titles, it would be seen

that he enjoyed many peculiar distinctions. From his éloge, he appears to have been a man of great suavity of manners and considerable erudition. We regret, from what has occurred to us in the perusal of his work, that he has not been sufficiently attentive to the later authors. His authorities are generally of an early date, and not always without suspicion of detailing stories more marvellous than true. For this, however, we can by no means vouch; and whatever may be the character of the authors at large, we perceive nothing improper or doubtful in the facts recorded.

Some right observations are premised; and in the first volume we find chapters on the following subjects:—impotence; copulation, which the laws of some countries strangely decree shall be public, to acquit the parties of impotence; castration; hermaphrodites; violation; sodomy; protracted deliveries; illegitimate births; abortions; monsters; molæ; doubtful state of the mind and body, viz. imbecillity, madness, dissembled and

imputed complaints.

The second volume contains an account of wounds in general, and particularly those of the neck, extremities, arteries, breast, belly, intestines, mesentery, pancreas, epiploon, liver, gall, bladder, umbilical cord, kidneys, bladder, womb, the fetus, and private parts; remarks on mutilation; apparent and violent death; dissection, poisons, umbilical cord, particular examination of the lungs (docimasie pulmonaire), and dissection of the fetus.

The last volume contains the other subjects of forensic medicine, and what the author styles medical police; viz. the methods of preserving the health of the people and of animals—in other words, the public hygieine. The first part contains what relates to people apparently drowned, and those who To these are added some very excellent have been hanged. observations on reports, the relations of cases, and the manner of drawing them up. A curious consultation is subjoined, a little like the law-suit of 'Stradling versus Styles.' A man of fifty-eight, his wife of fifty, and daughter of seventeen, were drowned in the same wreck; and, as some property depended on the survivor (for this was the reason of the consultation, as we well recollect, though not mentioned in the present volume) it was the subject of minute disquisition. The consulters were Payen and Lorry; and we shall add, as a specimen of the work, Dr. Mahon's remarks on this intricate subject, in the words of his editor.

'Dr. Mahon has not thought proper to consider this subject of priority of death. He saw that the forensic physician could often give only presumptions, and frequently unsatisfactory ones, instead of proofs; yet, in his course, he remarked that

there were cases in which the judges, from the common rules of philosophy and physiology, might suppose a priority of death.

I state, for example, a house on fire, in which were a man and a woman. Might not one suppose that the woman, more irritable, timid, and weak, would die first. The same supposition will apply if the house should tumble: yet how many circumstances may alter this ideal progress! A beam falling may kill the man, and the woman die long afterwards, suffocated by the ruins. How therefore can a succession be determined

by such unfounded presumptions?

Another case is quoted of a man, a woman, and a child, attacked and killed by robbers. It is supposed that the woman and child were killed after the man had been destroyed, as he was the most formidable, and would draw on this account the attention of the villains, or would press forward in defence of his wife and child. This would likely be the most common course; but can we be certain that this would always happen? I think not. Previous to the attack the robbers might fire. and the woman and the child might fall; or one might massacre these feeble creatures to assist his comrade in the attack of the man, &c. Dr. Mahon therefore advises the physician to decide only on certain well-attested facts. It is often wiser to doubt than to support opinions which, when plausibly discussed, might be creditable to the author, but which, in the eye of the philosopher, would want the principal recommendationtruth.

The subject of medical police is considered under the following heads — celibacy, cohabitation, contagion, marriage, pregnancy, delivery, cæsarean operation, painful punishments, and inoculation. We need not enlarge farther on a work which will not be very interesting to the English reader, and probably will not merit a translation.

ART.XI.— Mémoires de Henri Louis Le Kain, publiés par son Fils ainé; suivis d'une Corréspondence (inédite) de Voltaire, Garrick, Colardeau, Le Brun, &c. Paris. 1801.

Memoirs of Henry Lewis Le Kain, published by his eldest Son; to which is added an inedited Correspondence of Voltaire, Garrick, &c. Svo. Imported by De Boffe.

LE Kain was an actor of no common fame, introduced to the public in the early youth of Voltaire, and patronised by him with a steadiness and constancy which reflect on him no inconsiderable credit. Among a crowd of publications, we have taken up the Memoirs of Le Kain, as opposed to the author of the Polemic Life of Voltaire; and in this view, viz. audi alteram partem, we shall select his eulogium on the poet of Ferney.

Whoever reads these details, and observes their connexion, will remark that I have little resemblance to those ungrateful men who blush at a favour, and who, to complete their villany, basely calumniate their benefactor. I have known more than one of this race, with respect to Voltaire. I have been a witness of numerous injuries done to him by men of different kinds. He has complained of some, tacitly despised others,

but took vengeance on none.

The booksellers, whom he has enriched by his works, have publicly attacked him; but no one could, with justice, accuse him of deceit; for they were wholly in fault. M. Voltaire has been always faithful to his friends. His character was impetuous; but his heart was good; his soul full of compassion and sensibility. He received with peculiar modesty the praises which were profusely lavished on him by kings, by men of letters, and whole nations, united in admiration of him. Profound and accurate in his judgement on the works of others; gentle, polite, and graceful in common life; inflexible toward those who had offended him—such is his character, drawn from nature.

'No one can reproach him with having begun an attack; but, after the first hostilities, he appears like a lion roused from his den, and fatigued with the barking of those dogs which he has silenced by shaking his mane. Some he has crushed with his majestic paw: others have fled. I have heard him say, a thousand times, he was sensibly grieved that he could never be the friend of Crébillon; that he had always esteemed his talents more than his person; but he could never pardon his refusing to approve of Mahomet.

kind of literature. There is no subject which he has not adorned with considerable erudition, grace, taste, and philosophy. In other respects, the whole of Europe must repeat his eulogy: his works, scattered from pole to pole, are a sufficient subject. Happy the man who can appreciate them, and speak with

justice of an author so celebrated and so rare!'

This is the acmé of sublimity;—but the reader will perceive some little inconsistency in different parts, and some passages

not very distant from the representations of M. G-y.

Le Kain was the son of a cutler, and, 'stage-struck,' was acting in a private theatre when seen by M. Voltaire, who immediately patronised him. His features were not prepossessing; his voice was harsh and mournful; and his stature short. These seemed to be considerable obstacles; but 'when the feelings of his heart were developed, his whole person was animated, his attitudes were peculiarly striking, and expressed the great characters of passion.' Hurried away by these advantages, it is said

that the ladies would exclaim, 'How beautiful he is!'-This actor, however, did not please the higher ranks till he played Orosmanes at Versailles. Louis XV highly applauded him, and remarked that he had drawn tears from his eyes, who seldom wept. This fixed his credit; for the royal favour then decided every taste, and no one afterwards dared to criticise. He and mademoiselle Clairon first disused the ridiculous dresses of the French theatre, and appeared in habits suitable to the characters they represented. Le Kain generally ordered his own, and they were usually brilliant. In his performances he was as minutely attentive as Garrick. In private life he was simple and unornamented. He had an extensive knowledge of many subjects unconnected with the stage, joined with good sense, genius, and sometimes cheerfulness; though his disposition was, on the whole, gloomy. He died at the age of fortynine, of an inflammatory fever, in consequence, it is said, of some imprudences.

There are few events recorded of the life of Le Rain; and, indeed, had they been more numerous, they would not be very interesting to the English reader. We find some anecdotes of Voltaire which we had not before seen, and a few which are generally known. To these succeed some little pieces of Le Kain; such as memorials, addresses to the audience, criticisms, proposals, apologies, &c. The letters of Voltaire follow; which, as may be supposed, relate chiefly to theatrical representations. They

are lively, badinantes, and always affectionate.

The letters of prince Henry of Prussia show that he regarded Le Kain, whom he had entertained at Rheinsberg, with the warmest esteem. They are written with singular good sense and propriety: and are truly complaisant, without the slightest particle of fulsome flattery, so often found in the epistles of Voltaire. The letters of Garrick are also warm and affectionate, though written in bad French. Le Kain visited him in England. But what does Garrick mean by his having asked permission of the king to drink the waters of Bath? Perhaps, like sir Joseph Banks, when writing to a Frenchman, he thought he must employ the French manières de parler.

Various miscellaneous letters follow. Those of madame Denis, mademoiselle Clairon, MM. Colardeau, La Harpe, and Saurin, particularly interested us; but they might not interest the reader, to whom the events to which they allude, long since passed, are probably unknown. The language is often peculiarly

elegant.

Le Kain's own letters are inferior as compositions; but they display a benevolent heart, with sound good sense. His account of what passed at Ferney, on his rehearing before Voltaire the part of Gengis Khan, in the Orphan of China, amused us! Le Kain owns that, though he excited great applause, he

had mistaken the author's object. When he again played it after the conceptions of the author, 'one of his comrades, who had perceived his first error, could not conceal his astonishment at the superior effect which he produced; and said to those near him, We can easily perceive that he has been at Ferney.'— 'Without examining the motive which dictated this eulogy,' adds Le Kain, 'I was not the less sensible of it.' The letters, however, are few: those to the prince of Prussia are most striking. Some critical remarks and papers, illustrating dif-

ferent parts of the volume, conclude the whole.

While writing the above, a pamphlet reached us, entitled Jugemens sur Le Kain, par Molé and Linguet'—Opinions respecting Le Kain, by Molé and Linguet; or a supplement to the memoirs of this great actor, followed by some remarks on Garrick by Linguet. We chiefly notice this work as it is a supplement to the former, though it adds nothing very important. The panegyric of Molé is extravagant; but there are some remarks on acting, and on Le Kain's manner, that appear to be judicious. Linguet is more moderate, though he represents Le Kain as the French Demosthenes. Like the Grecian orator, also, he had many natural defects to conquer. The reflexions on Garrick are highly reprehensible, and wholly unjust.





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FOREIGN LITERATURE.

FRANCE.

Mémoire sur les Moyens d'accélérer les Progrès de la Botanique. Memoir on the Means of accelerating the Progress of Botany. By M. Villars. 12mo. Paris.—We shortly notice this memoir, to assist the author's useful attempt. The number of plants is so greatly increased, botanic gardens are so largely multiplied, and such immense collections have been formed, that he greatly apprehends disorder may arise from such vast riches, and botany again fall into confusion. We have not apprehensions equally alive; but can safely join in his wishes, that some work, like that of Bauhin, would unite the whole extent of our botanical knowledge. The collector however should be much more concise than Bauhin, or his work would be too voluminous.

Histoire des Chênes de l'Amérique, ou Déscription et Figures de toutes les Espèces et Variétés de Chênes de l'Amérique Septentrionale, &c. History of American Oaks, or a Description and Figures of every Species and Variety of the Oaks of North America; considered according to their Botanical Relations, their Culture, and Use. By A. Michaux. Large Folio. With Plates. Paris .- The oak, though highly useful, is not well understood. Its wood is excellent; its cork and gall-nut are objects of the greatest importance; and the tanner, the dyer, and the physician, find it of singular value. Even as an aliment, it is sometimes still useful (we allude to the sweet acorn); and an oil has been occasionally extracted from its fruit. As each species has offered something peculiarly valuable which is wanting, or exists but in a small proportion in the others, it is of consequence to extend our knowledge of this important tribe. We are not however without assistants. Our own Evelyn has collected what was known in his time; M. Secondat's Memoir on the Oak contains some valuable observations; and another by APP. Vol. 35. 2 R

Des Fontaines, in the second volume of the Flora Atlantica, on the sweet acorn, is particularly curious. The oaks of America

have not, nevertheless, been sufficiently described.

Our present author is well qualified for the task. He has long since visited Syria, Babylonia, and Persia, and brought to France a large collection of plants both useful and ornamental. In 1785 he went to North America, and established gardens at New York and Charleston, to raise the plants that he collected. He remained in America eleven years, and sent to France numerous boxes of seeds and cuttings, which have been cultivated in every part of Europe. At his return, he was employed in arranging his observations, writing a description of his travels, and collecting a history of American plants. The present history was in the press when he was appointed botanist to the expedition lately sent from France under M. Baudin.

The text is in French, but the definitions are in Latin. The history contains twenty species, and many varieties, arranged in a methodical order, from the form of the leaves, and the annual or bis-annual fructification. They are discriminated very

clearly and satisfactorily.

Each species is drawn in its different states by M. Redouté, and engraven by MM. Sellier and Plée. Under each is carefully marked the manner of cultivating the plant, the soil best adapted to it, and those parts of France in which it would most conveniently be naturalised. Some of the species were before unknown; and we find several new ones, at least varieties, in the very splendid publication of Lepidopterous Insects of Georgia, by Mr. Abbott. On many others we perceive some new and interesting remarks, which we should enlarge on, but that we hope the whole may appear in an English dress.

Histoire Naturelle des Quadrupèdes ovipares, &c. Natural History of the oviparous Quadrupeds, by F. M. Daudin. Large 4to. Nos. I and II. with coloured Plates, from Drawings taken from Nature, by J. Barraband.—This work is to be divided into thirty numbers, and is designed as a continuation of the Planches enluminées of Buffon. The animals represented in the plates are placed in the gallery of the Museum of Natural History, &c. in the collections of Le Vaillant, Bosc, &c. The price will be 5s. each number.

Essais sur l'Histoire Naturelle des Quadrupèdes de la Province de Paraguay, &c. Essays on the Natural History of the Animals of the Province of Paraguay, by Don Felix d'Azara: written between the Years 1783 and 1796: with an Appendix relating to some Species of Reptiles; forming a necessary Supplement to the Works of Buffon. Translated from an unpublished Manuscript, by M. L. F. Moreau de St. Mery. 2 Vols. 8vo. Paris.—The part of America where Don Azara lived has been

visited by few naturalists; and his description of more than eighty animals, which he has observed in their natural haunts, is proportionally more valuable. Under each animal, we find an exact statement of his form and habits, with the Indian and Spanish names, and an examination of the accounts of different naturalists, particularly of Buffon. In short, he has done more than could have been expected, without books or large collections; and has rectified many errors that had crept into the nomenclature, the description of the manners, and the distinctive characters of many animals. A suitable introduction is prefixed.

Among the animals whose history, and the account of whose manners, our author has corrected in some essential points, we notice the tapir, the peccari, four species of stags, the agoutes, the apes, thirteen species of bats, the horse, the ass, mules, the crocodile of America, and other lizards. In short, many new species are described, and much is added to our former knowledge of those which had before engaged the at-

tention of naturalists.

Histoire Naturelle d'une Partie d'Oiseaux nouveaux et rares de l'Amérique et des Indes. Natural History of a Part of the new and rare Birds of America and India. By F. Le Vaillant. 1st, 2d, and 3d Numbers. - When we suggested some little distrust of M. Vaillant's accuracy as a traveler, we meaned not to extend it to his descriptions in natural history. His natural history of the birds of Africa has been received, by the best judges, with great respect; and the fifteenth number is just published. Two volumes are completed, and we have reason to expect a con-The present work is designed to form a part of tinuation. the first.

Publications of this kind, in numbers, are so numerous in France and Germany, that, having announced their first appearance and object, we must leave our readers to suppose that they are continued with great assiduity. In fact, our whole limits would scarcely enable us to give even the shortest account of each succeeding delivery (hvraison), unless it be concisely mentioned in our review of a kindred subject. This work, of which we have seen three numbers, is very beautiful: it is from the press of Didot the younger; and the figures are printed in colours, by an artist of distinguished excellence in this branch, M. Lan-glois. It is published in imperial folio and quarto. There is also a smaller edition, to form a supplement to the Natural History of Buffon—we mean that of Sonnini.

The three numbers that we have seen, relate to the calao. Many new species are described and represented, which are The calao is the hornbill, of which the toucan truly curious.

will now perhaps be divided into more than one, though the whole tribe is very strongly discriminated.

Le Médicin Naturaliste, &c. The Physician Naturalist, or Observations in Medicine and Natural History. By J. E. Gilibert. 12mo.-M. Gilibert is the author of many medical works equally interesting and pleasing, particularly one or two on subjects connected with the Duties and Qualifications of a Physician,' which we remember to have read with pleasure many years since. He, at first, shortly explains the principles of Sydenham, Morton, and Chirac, by some account of their lives and writings. This is followed by a historical abstract of the diseases which reigned at Lyons, at the end of 1797 and the beginning of 1798, and concludes with several clinical observations for the years 1784 and 1785. He adds some slight remarks on inflammations, eruptive fevers, evacuations, convulsive disorders, pains, ectopiæ, cachexies, and defects. The medical memoirs are concluded by some observations on natural history and botany; the latter chiefly relative to the plants round Lyons. The zoologic and mineralogic memoirs are: 1. On the elk of Lithuania; 2. On the beaver and his habitation; 3. On the genital organs of tortoises and the heath-polt; 4. On the physical geography of the great duchy of Lithuania, and on its climate. At the end is a tract by Latourette, 'Enumeratio Methodica Graminum tractûs Lugdunæi.

Institutions de Médecine, &c. Institutions of Medicine, or an Explanation of the Theory and Practice of that Science, collected from the Ancients and Moderns; a didactic Work, containing the general Knowledge requisite for those who are employed in the Art of Healing. By P. Petit Radel. 8vo. Paris .- The title sufficiently explains the author's object; and we may add, that his work was approved of by commissaries appointed by the faculty of medicine more than ten years since, though the publication has been delayed till the beginning of the present year. The work is divided into four parts—physiology, hygieine, pathology, and therapeutics. The first is divided into six sections, treating of the elements considered as constituent parts of the animal organisation; the organised solids, either fibrous or lamellated; the animal fluids accurately analysed; the different corporeal functions, &c. The hygieine treats of the six non-naturals in their usual order.

The pathology, which is more strictly medical, is divided into four sections—symptomatology, nosology, ætiology, and semeiology. The author adds another; viz. metaboletology—the doctrine of metastasis, or the conversion of diseases into each other, including the changes that occur in their course.

The four sections into which therapeutics are divided treat of

the regimen, with relation to the six non-naturals, pharmaceutic remedies, chirurgic operations, and the employment of all these means to fulfil the indications pointed out. On the whole, the subject is perspicuously treated; but we are by no means prejudiced in favour of the author's medical erudition or practical skill: the whole is too crude and trite—a scion of the Boerhaavian stock.

Constitution Epidémique de Grénoble, des trois dernières Mois de l'An VII, &c. The Epidemic Constitution of Grenoble, during the three last Months of the Year VII (July, August, and September, 1799), and the three first of the Year VIII (October, November, and December, 1800); with an Account of the Diseases which have preceded and followed. 12mg. Paris.—Our author, Mr. Laugier, appears rather in the light of an attentive observer than an able or active practitioner. A collection of good observations is, however, always valuable; and we are consequently induced to look on this work with a more favourable eye than we can regard many of the medical publications of France.

The description of the epidemic, which was a common bilious fever, is followed by three dissertations, which contain some valuable observations. The first is on the knowledge useful to a physician, the second on living forces, and the third on the system of Brown. That system, in the author's opinion, cannot, with all the splendor of a brilliant theory, bear the rigorous examination of a philosopher, or the cool experimental inquiry of the physician.

On the whole, however, this work merits very considerable attention. The author's knowledge of diseases is extensive; and if, in every point, his practice do not exactly coincide with those plans which succeed in our hands, it is certainly

rational, and appears to have been successful,

Essai sur le Blanchement, &c. Essay on Bleaching; with a Description of the new Method of Bleaching by Means of Vapour, according to the Process of M. Chaptal. By R. O'Reilly, of the Academy of Bologna. 8vo. Paris.—' The art of bleaching, whose origin is lost in the darkness of the remotest ages, seemed to be condemned to an eternal infancy, when Berthollet created the use of the oxygenated muriatic acid, and at once placed this art on a level with those that have received the last improvements: thus the obscure chrysalis, after having long vegetated in the bonds of an imperfect life, suddenly expands its wings, and soars even above those who would have trodden it under their feet.'

This is justly, but somewhat too poetically, said; and the remainder of the preface is in the same inflated style: yet the

author soon condescends to be useful; and has described, with equal simplicity and clearness, his various machines, and the application of the gaseous oxygenated acid, to every different use for which it appears adapted. The employment of the acid in the form of gas is undoubtedly an improvement of the first magnitude and importance; and the very extensive application which it admits in this form renders it an object of the greatest value. The labour of many months is now reduced to a few hours. We shall transcribe what he remarks on the recovery of books and prints grown yellow by age. After transcribing the process of M. Chaptal, he adds:—

'MM. Vialard and Heudier have applied this method to some of the most valuable books of the national library. I believe they were the first who, since the publication of M. Chaptal's memoirs, have employed it with very obvious advantage. In reality, these memoirs show that a great precision in the proportions of the acid must be accompanied by an address in managing the process, very difficult to attain. Without these we may destroy the works that we wish to restore. Engravings and drawings with three crayons may be revivified completely in this way: engravings grown yellow by time are perfectly whitened, and receive a second existence. The traces of age disappear, and the books—thanks to this restorative art! recover the vigor, the brilliancy, the freshness, which they at first possessed; and, for the first moment in this department, Time finds himself obliged to begin again the destruction with which he had marked his progress.'

Art de peindre et d'imprimer les Toiles, &c. Art of painting and printing Linens, of the different Colours distinguished by the Terms great and little Tint. 8vo.—This little work aims only at utility; but the processes are clearly explained; and much inconvenience will be avoided by attending to the directions

here given.

We find the necessary instructions for the preparation of cloths; some information respecting the original materials and their properties; on the choice and composition of colours; on the structure and engraving of the plates. It is a useful manual, and contains the result of observations made in the most respectable manufactories: indeed it appears to contain whatever may be necessary to conduct a similar institution.

Mélanges Physico mathématiques, &c. A Collection of Memoirs, containing a Description of many new Machines and Instruments of Philosophy and domestic Economy. By J. B. Berard. 8vo. Paris.—This collection is published by order of the minister of the interior, and contains an account of many new and curious machines. We particularly noticed a very ingenious photometer and manometer, and a nocturlabe, designed to show the hour of the night by the stars. It is useless, however, to enumerate the different objects described (which are eleven in number), as we cannot convey an accurate idea of the machines without the plates. The author supposes his reader to have attained the first principles of geometry and mechanics; and with these assistances the machines will be easily understood.

Histoire Céleste Françoise, &c. French Celestial History, containing Observations made by many French Astronomers. Published by J. de Lalande. Vol. I. 4to.—This work is in imitation of Flamstead's, whose catalogue has been greatly augmented, and whose errors have been corrected by Herschel. The observations of the Academy of Sciences began in 1666, and were continued to 1685. These were published in 1741 by P. Lemonnier, in his Celestial History. J. D. Cassini designed to publish the continuation, and gave a part of it, in the Memoirs of the Academy, as a part of the article which contained his own observations from 1785 to 1791. M. de Lalande engaged to publish the others, among which there were several peculiarly exact and important.

In 1796, government ordered the publication of a new celestial history; and M. de Lalande, to whose care it was consigned, chose to begin with the most recent observations, and particularly with those of the stars, which are of most importance to astronomy; for which the world is chiefly indebted to his diligence. The observations on eclipses, conjunctions, and oppositions of the planets, as well as those on Mercury, by M. Vidal, occur in the different volumes of the Connoissance des Temps, and for this reason are not inserted in the present history.

The author first gives the observations in the military school, at a period of the revolution when none were made at the great observatory, from a want of astronomers and instruments. We cannot, in this part of our journal, enlarge on the historical details of the successive progress of astronomy in France; and these details, interesting in themselves, are however more so by the proofs they furnish of the extent of the author's knowledge, his indefatigable zeal for the perfection of the science to which his studies are consecrated, and which he has enriched by his discoveries. We shall only add the observations of some other astronomers in the volume before us.

Antony Darquier published in 1777 and 1782 two volumes of Observations, with three continuations, in the Memoirs of the Academy of Toulouse. The third volume appeared in 1792. We here find the sixth continuation of these observations, made at Toulouse in the years 1797 and 1798.

At the end of these Observations we find those of the stars, made in 1783 by J. L. Dagelet, anterior to those of the astronomers who have published in the Memoirs of the Academy for 1789 and 1790. To this volume the author has joined the representation of his great quadrant, and of the machine contrived to move it from the east to the west side of the wall; as well as a figure of the mechanism, contrived by Mechain in the mural of the observatory, to support the centre of the weight of the telescope.

Mappemonde Céleste, &c. Map of the Heavens, or an Explanation of Astronomical Principles, relative to the Terrestrial Globe, and to a general Knowledge of the Heavenly Bodies; with the Application of these two Objects to different elementary Notions of Geometry, Optics, Perspective, and Calculus. By J. Ch. Maclot. 8vo. Paris.—The author's object was to give a general idea of geometry, so far as it regards the earth and the heavenly bodies. The first part of his work contains an explanation of the map of the world, the phænomena observable at sea, and an explanation of the doctrine of the sphere.

In the second part we find a general table of the principal groupes of stars, and the use of the celestial artificial globe in

discovering and distinguishing them.

The supplement is preceded by a short historical account of the origin and progress of astronomy. We next find a general view of geometry, with some new examples of geometrical demonstrations; and the work is concluded by an enumeration of the principles which are the foundation of the numerical calculus, and the use of this calculus in practical geometry.

Voyages au Mont Perdu, &c. Journeys to Mont Perdu, and to the adjacent Parts of the Higher Pyrenees. By L. Ramond. 8vo. Paris.—Though we cannot expect to meet with the deep researches and just taste of M. de la Saussure in similar Alpine tours, yet our author is no unworthy successor of that traveler and naturalist. Of his talents in this department he has given some favourable specimens in different scientific collections; and we have read the present work with great satisfaction and instruction. Our account of it has been delayed, because, had our limits permitted, it would have been more extensive.

These journeys are divided into four parts. The first two contain the description of two new philosophic and mineralogic tours to Mont Perdu, the most elevated of the Pyrenees. The third part contains a tour to the valley of Gavarnie, and some of the most interesting spots in the neighbourhood, particularly to the port of Canau and to Troumousse. The fourth

is an account of a journey to Vignemale, to Piméné, and to the circus of Gavarnie. The descriptions are concluded by some reflexions on the northern part of the Pyrenean chain. M. Ramond compares the Pyrenees to the Alps; and concludes—1. that the former chain is more simple; 2. that more difficulty seems to have occurred in the formation of the secondary mountains, superimposed on the primitive; 3. that the calcareous substance, both in the primary and secondary mountains, is in greater. proportion; 4. that the secondary portion is raised to a more. considerable height; and 5. that the invasion is effected in a contrary direction. On the whole, he thinks that the long chain of the Pyrenees presents the most simple order in which mountains may be studied; and that the chain of the Alps multiplies and corrects the data which have formed the bases of theories.

GERMANY.

Allgemeine Beitræge zur Befærderung des Ackerbaues, &c. A Collection of Memoirs concerning Agriculture, Arts, Manufactures, and Professions. tures, and Professions. Published by J. G. Geissler. 800. With Plates. Volume I. Zittau. — We hasten to announce this collection, because it appears likely to become a valuable Industry, either as it regards agriculture or manufactures, is the source of the prosperity of a state. It is perfected by instruction, and expanded by emulation. To collect every interesting discovery will therefore not only add to the stock of information, but will assist the spread of emulation.

The memoirs are either originally German, or translated from other languages. Eleven are contained in the volume before us. We shall give some account of those which are most interesting, and which can be rendered intelligible without the plates.

I. A Description of a new Wheel to spin Flax, with a progressive Spindle; by J. G. Prasse.'

'II. On the Danger of employing Vessels of Lead, of Brass,

or Copper, in Dairies; by T. Hayes.'

' III. A new Method of tanning Leather, and rendering different animal and vegetable Substances impermeable to Water,; such as Flax, Hemp, Cotton, Silk, Hair, Wool, &c.; by Desmond.

' IV. A Method of preparing, with Shreds of Leather, a Varnish for the Ornament of Carriages, to varnish Vases, Books, Paper, &c.; by Hooper.'-This seems to be an English essay; but we do not recollect to have seen it before. The shreds of leather are reduced to a paste, from which the water is pressed. About a fourth part of hemp, old cordage, &c. with some fine clay, are added to make brown paper, and about three fourths of rags to produce white paper.

V. A Process for obtaining from Charcoal of Wood a

larger Proportion of Pot-ash; by G. Glenny.'

'VI. A Method of depriving Treacle of its disagreeable Taste, and rendering it a Substitute for Sugar.'—This depends on mixing equal parts of treacle and water, with one-fourth of charcoal; we mean a quarter part of the two substances mixed together. The mixture is to be boiled half an hour, filtered, and evaporated to the consistence of a syrup. As much syrup is thus obtained as was originally employed of treacle.

'VII. The Composition of a Water for destroying Caterpillars, Ants, and other Insects; by Tatin.'—A pound and three-quarters of black soap is added to as much sulphur, with two pounds of the lycoperdon tuber, and fifteen gallons of water. The whole is mixed and sprinkled on the trees. It is immedi-

ately fatal to the insects.

VIII. On the Influence of Vital Air on the Colour of Substances, and on a new Method of preparing solid Pigments for Painters; by Fourcroy.'—This memoir we have had occasion to notice.

'IX. A horizontal Churn' (much too complicated); 'by

Velley.

' X. On the Use of Mordants in dying Cotton red; by

Chaptal.'

'XI. An Essay on the Means of rendering Pigments more perfect; by Guyton.'

J. Hedwig Species Muscorum Frondosorum, &c. Hedwig's Species of leafy Mosses, illustrated by 77 coloured Copperplates; edited as a posthumous work by Fr. Schwægriehen. 410. Leipsic.—The name of Hedwig is by no means new to our journal; and we have followed him with care in his minute observations on the fructifications of mosses. We learn, with regret, that he is no more. The present work was only half completed at his death; but the materials have been taken up by his friend and pupil M. Schwægriehen, who has added many very accurate descriptions of specific differences, and, in this work at least, has

fulfilled all Hedwig's designs.

The great principle of this author's system is founded on the form of the overture of the capsule; and the secondary principle rests on the form and situation of the flowers. We must not, however, conceal that this arrangement is not universally approved: on the contrary, it has been opposed by many learned botanists, particularly by M. Wildenow. There is undoubtedly much uncertainty in this foundation; but it would not be easy to discover in these plants a more secure basis. Hedwig was well aware of this uncertainty, and has not concealed the inconvenience of his system. He knew that the form of the flowers was subject to variations, and he was no longer willing to separate

the two species of maium and bryum. Perhaps he might have made some other alterations, for the same reasons, had he lived to finish his work.

The description of the species is clear and precise, without the prolixity of Bridel, whose work contains only 339 species, of which many are doubtful; while in the present volume there

are 362 very clearly ascertained.

Of the new species, twenty belong to the Flora of Germany, of which the greater number were discovered by Ludwig. There are nine Swedish species, without reckoning those latterly described by Schwartz; thirty-seven from North America, received from Dr. Muhlenberg of Lancaster in Pennsylvania; twenty-two from the West Indies, sent by Schwartz; nineteen from the South Sea, the Cape of Good Hope, and New Zealand.

The work is accompanied by a life of Hedwig, and by some of his aphorisms on the structure of plants and the characters of the cryptogamic species; but these last are somewhat hypothetical. Twenty-seven plates represent nearly 150 species of new mosses, or those not yet ascertained. The plates and the printing appear to be superior to the greater number of German publications.

Chemie für Forstmanner, &c. The Chemistry of Forests, Economy, and Botany. By F. Th. Frenzal. With a Preface, by Professor Lampadius. With seven Plates. 8vo. Leipsic .- The observations in this work are apparently scattered without an anxious attention to order; yet we may perhaps trace three divisions, though not professedly or pointedly separate. In the first section the author treats of the composition of bodies, of their affinities, and other parts of chemical science. The second relates to alkaline and acid salts, in a great measure confined to the nitric acid and the composition of gunpowder. The third is on the constituent principles of vegetables. The most interesting articles are, on charcoal, on the charring of wood, on coals, on the manner of cutting turf and of reducing it to charcoal, the residuum of plants after combustion, and the manufacture of pot-ash. He afterwards speaks more particularly of the component parts of plants, as their gum, resin, farina, &c. noticing the mineral acids as accidental ingredients of vegetables.

The fourth section is on the nature of soil, and of the re-agents proper to discover it; and is concluded by some remarks on the nutrition of plants and the fertility of the earth.

It will be obvious that it was not the intention of the author to give a system of chemistry, but to treat only of such parts of the science as were most peculiarly connected with the subjects in his title. These he has certainly illustrated; yet it may be doubted whether his chemical views are not too partial and confined. Many essential parts are omitted; the doctrines of salts, the theory of the decomposition of water, the description of metals, and the doctrine of fermentation—peculiarly adapted for those to whom the volume is addressed—are not mentioned. Perhaps he should have offered his work as a supplement to some known chemical system, as those of Jacques and Gren, which we chiefly mention as best known in Germany.

Helminthology of the Human Body; containing a Description of its Insects and Worms. By Dr. J. H. Joerdens. 2 Vols. 8vo. With twenty-two Plates. Grau.—The author joins to his descriptions physiological and therapeutical remarks, and adds a complete list of all the works that have appeared on the subject, at least what he deems complete; for we find one or two English works, though of little importance, omitted. He professes to have watched over the execution of the plates, which represent not only the insects and worms in their different states of change, but their arms and weapons of defence, drawn as they appear in a good microscope. The figures are his own, engraved and coloured by M. Frauenholz of Nuremberg.

In the introduction, Dr. Joerdens treats in general of the different sorts of wounds inflicted by insects, and the situations in which the consequences may be dangerous. In the first part of the first volume he details the history of the insects which live and are propagated in the human body; in the second, that of the insects external to it, remarkable by the different disorders and inconveniences they occasion; and in the third, the history

of those insects which prey on the human body.

The second volume, which is adorned with seven plates, contains—1. The history of the worms which inhabit the human body, as the intestinal worms, the spermatic animals, &c. 2. Those whose attack is accidental, who live under the skin, or are introduced into the body by accident. In the supplement the author speaks of worms whose existence is doubtful, and of some amphibia observed in the human body as extraordinary phænomena. Perhaps this work may be acceptable to the English reader in his own language. We have few good works on the subject, except a paper of Dr. Hooper's in a late collection.

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Versuch einer Geschichte des Lichts, &c. Uber die Werkungen des Lichts, &c.

An Essay on a History of Light, with respect to its Influence on Natural Bodies in general, and on the Human Body. By J. Ch. Ebermaier. 8vo. Osnabruk.

Ch. Ebermaier. 8vo. Osnabruk.

Of the Effects of Light on the Human Body. By E. Horn.

8vo. Kænigsberg.

These two dissertations received the first and second prizes from the university of Göttingen, in answer to the following question;—' Quænam sit lucis in corpus humanum vivum efficacia, tum noxia, tum, præter eam partem quam in visu agit, utilis et salutaris?' If these memoirs succeeded, the value of those in competition could not be considerable; for we cannot consider them as important additions to our stock of science. The author of the Essay treats in succession of the nature of light, of its influence on the three kingdoms of nature, and on the human body; and considers each subject in a chemical, physiological, pathological, and therapeutical view.

The second memoir, which obtained what is called the accessit, is principally filled by considerations on the influence of light on plants and animals. The author distinguishes the effects into those which are immediate, mediate, and hurtful. It is however, in every view, a very inferior perform-

ance.

Encyclopædisches Werterbuch der Kritischen Philosophie, &c. An Encyclopædia of the Critical Philosophy, or an Attempt to explain, with Clearness and Ease, the Principles and Ideas contained in the critical and dogmatical Works of Kant. By G. S. A. Mellin. 3 Vols. 8vo. Jena.—This dictionary is not confined exclusively to the philosophy of Kant, though compiled on his principles, and containing, in general, his doctrines. The third volume is not concluded; and the alphabet has proceeded no farther than J.

J. Kant's Logik. 8vo. Kænigsberg.—We have often intended to enlarge on the fashionable philosophy of Germany, but were obliged to confess that we could not comprehend it. Mr. Belsham has made a similar confession; but, when his disciples descend to common sense, we will again take up his works. His logic is somewhat more intelligible; though we find even this difficult to understand, and of course to convey, some of the more material parts of it. We shall therefore content ourselves with a general account of the work.

Kant himself commissioned the present author, M. Jæsche of Kænigsberg, one of his most distinguished scholars, to publish his logic, as it was taught in his class; and for this purpose he

put into his hands his own text book, Meyer's Elements, with the manuscript notes and additions by himself. From this the present work is derived. The substance therefore is Kant's: the arrangement, the style, and ornaments, belong to M. Jæsche.

The introduction contains the preliminary doctrines; and the work itself is divided into two parts—the elementary doctrine, and the general methodic doctrine, established on the scientific

classification of ideas.

Of the introduction we shall not presume to offer an analysis; and the works of Kant are not adapted for extracts. We shall

give, however, a short account of the contents.

The author first defines logic, establishes its principal divisions, its utility, and the manner of teaching it. He next gives a general idea of philosophy; of the philosophy of the schools and of the world; and, having pointed out the objects of this science, adds an abstract of its history. He next treats of perceptions in general; of intuitive and discursive perceptions; of intuition; of ideas and their differences, and of the logical and esthetic perfection of perceptions. The introduction concludes with explanations of probability and its species, on doubt, on the different methods of philosophy, and on the difference of theoretic and practical perception.

The plan of the work itself appears simple and perspicuous; but we can add no more. We understand that M. Jæsche is

also commissioned to publish Kant's Metaphysics.

J. Kant, nebst einigen Bemerkungen über die Kantische Philosophie. Von Fülleborn.

Ch. Garve, nebst einigen Bruckstuken über ihn. Von Fülleborn.

J. Kant, with some Remarks on his Philosophy By Fülleborn.

Ch. Garve, with some Remarks on his Life and Character. By Fülleborn. With Portraits of Kant and Garve. 8vo. Breslaw.—The author is so full of admiration of Kant, that he has not trusted his own abilities to write an eulogy on his works, and has consequently borrowed his remarks from the characters of the poetical and prosaic authors of Germany. This eulogy is followed by the severe censures of Klopstock on the writings of that philosopher, and by some criticisms from the French and English journals. The last pieces are a sketch of the character and genius of Kant, by his disciple Herder; and a view of his philosophy in general, by Fülleborn.

The second piece is a monument erected to the memory of Garve; with some account of his life and writings, which, as the author is little known, would be uninteresting to the English

reader.

ITALY.

Catalogo delle Lingue conoscente, &c. A Catalogue of known Languages; with an Account of their Difference and Resemblance: a Work of the Abbate Don Lorenzo Hervas. 4to. Cesena. 1784! -Eighteen years have elapsed since the publication of the present and some similar works by this laborious author; and no journal has yet announced them. We remember, in an English periodical collection, some information of a philological attempt, equally singular, and perhaps more incredible. The pressure of the moment prevents us from inquiring, whether the name is the same; though we suspect it not to be so-Some error may have occasioned the discordance, or there may have been two such 'monsters of erudition.' We are confident, however, that that author was said not to have concluded his remarks; and that he died without completing them. The reason of their being hitherto unknown seems to be this: the author printed them in Italy, and the whole impression was sent to Spain, whence few copies have been brought; and our first information concerning them was from M. Fischer's Letters on Spain-a work of which we hope to give some account in our next Appendix. What renders our author's work interesting is, that he has compared more than 300 vocabularies or manuscript grammars of languages, collected during his residence in India or America, or communicated by his brethren in India and in Spain. His philological works are five in number, and form from the seventeenth to the twenty-first volume of his complete collection. Of this, which is the principal, we shall give a short view of the contents. The others we may notice at a future opportunity.

The first chapter contains a historic and comparative account of the languages of America; viz. those of Terra del Fuego; Patagonia; Chili; Paraguay; Brasil; of the Terra Firma; of the Oronoque; Casanara; Meta, and the Antilles; of Peru; of Quito, so far as Panama; of New Spain; California; North America, and Florida. The number of these

languages and dialects exceeds 200.

The second chapter contains the languages of the South Sea, from America to the Philippines, including the Malay language; with twenty-nine dialects, and five languages of Mindanao.

In the third chapter, the author examines the languages of Asia:—1. Of China, so far as the Ganges; and we find fifteen dialects of the Chinese. 2. Of the mouth of the Ganges to the Persian Gulf. 3. Of Arabia, Syria, Palestine, Armenia, Natolia, and the other provinces of the Turkish empire. 4. Of Chinese Tartary, Russia, and Japan.—Under the article of Georgia we find a singular analogy between its language and that of Biscay. On this subject the author enlarges, and adduces some proofs of Georgia having been peopled by Spa-

niards—he should have said by a Celtic colony.

The fourth chapter treats of European languages; viz. the Illyric; Scythian; Turkish; Grecian; Teutonic; Celtic; Latin, Cantabrian, Opican, Sabine, Sabellan, Volscan, and Etruscan—ancient languages of Italy. On the subject of the Latin, the author speaks, as derivatives, of French, Italian, Portuguese, Spanish, with the languages of Moldavia and Walachia; adding particular remarks on each. The derivative dialects of the Celtic are, the Gallo-Antico-Breton, the old Breton; the Galato-Antico-Armorican, the Gaelic, the English, Irish, and Persian.

The fifth chapter contains the languages of Africa; viz. those of Egypt, among which we find twenty-four dialects of the Galas; those of Zanguebar, and the Hottentots—among the latter we reckon the Mandingo, with thirty-two dialects; with twenty-eight dialects of the Gialofa used in Guinea.

At the end the author gives a view of all the mother languages that are known; of which he reckons for America fifty; for Asia seven—viz. the Chinese, the Malay, the Indian, the Hebrew, the Armenian, the Mantchou, and the Mogul; for Europe seven—viz. the Illyrian, the Scythian, the Tartaro-Mongul, the Greek, the Teutonic, the Celtic, and the Cantabrian; for Africa eight—viz. the Coptic, the Galvis, the Hottentot, the Congo, the Mandingo, the Gialofa, the Foulah, and the Akanic.

vented us from offering any review of MAPS and CHARTS in the present Appendix. This department will, however, be still continued; and the circumstances which have occasioned the amission, will, we trust, have the effect of rendering it more copious and important at the conclusion of our next volume.

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ALPHABETIC INDEX

TO THE

AUTHORS' NAMES & TITLES OF BOOKS.

A BOOLLATIPHI historiae	Egypti	Barrow's poem on the peace,	234
compendium,	241	Barry's Bull-baiting, a sermon	218
Adams on the cancerous breast,	327	Bartley on the converting pastur	
		into tillage,	471
Agricultural society (Sussex), Prings of,	471	Barton's Fragments of the natural	
		of Pennsylvania,	119
Agriculture of W. Riding of Yor General view of,		Baseley's sermons,	210
	271		478
Alfred, Vision of,	39	Bacon's essays, New editions of,	478
Algerine captive,	113	Page fort Lady Corolding	477
Allen's orthographical exercises,	348	Beaufort, Lady Geraldine,	
Allnatt's poem of Poverty,	351	Beddoes on the management	336
America (North), Voyages through		Consumptive,	343
Amiable tutoress,	107	Bedford, Charge to clergy of,	
Anecdotes of heroic conduct of		, Letter to Mr. Fox on th	A TH
during French revolution,	360	racter of the duke of,	477
Animali parlanti,	544	Bellenger's French and English	
Annales de Chymie,	563	compared,	227
Annals of Insanity,	105	Belsham on the late treaty of	peace,
Apocalypse, Evidence for the a			338
ticity of the,	436	Birth-day,	472
Apoplexy, Observations on Lang		Black's Political calumny refuted	
opinion respecting,	223	Bloomfield's rural tales,	67
, Historic sketch of the		Boaden's Rainy day,	111
troversy upon,	468	Book-keeping, Elements of,	348
Appeal to the society of friends,	103	Bread.—Review of statutes and	ordi-
Aristotle's Metaphysics, English		nances of assize,	343
lation of,	251	Britain (Great), Survey of the str	
Articles of church of England	proved	and opulence of,	180
not Calvinistic,	456	Brown's view of agriculture o	f W.
Assize, Review of statutes and	ordi-	Riding of Yorkshire,	271
nances of,	343	Buffon's natural history, New editi	on of,
Astronomy, Treatise on,	349	1 40	558
Atcheson on the carrying part	of the	Buildings in England and Sco	tland,
coal trade.	356	Plans and views of,	323
Atlantis, Letters on the,	78	Bull-baiting, a sermon,	218
Atlas, Circular,	18	Burdett (sir Francis)'s speech on m	notion
Atonement and sacrifice, Discour	rses on	for inquiry into conduct of admin	aistra-
scriptural doctrines of,	53	tion,	458
Atwood's review of statutes and	ordi-	Butcher's Facts respecting high price	ces of
nances of assize,	343	provisions,	359
1		Only security for peace,	467
BABYLONIAN inscriptions, Di	sserta-		
tion on,	153	CABINET of Lilliput,	472
Bagatella, La,	107	Caines on the cultivation of the Ota	heite
Bailly on the Atlantis of Plato,	78	sugar-cane,	240
Bampton lectures, Faber's,	445	Calumny (Political) refuted,	356
Barker on gonorrhœa virulenta,	345	Cancer, Cases of,	469
App. Vol. 35.		9.5	

Cancerous breast, Observations	on the,		gham 22
Cappe (Rev. Newcombe), Sermo			the two
funeral of,	219		lton's
Capper on the winds and monsoon	ns, 11	PRELATIONA	23
Captive, Algerine	113		236
Cartwright's letter to Mr. Fox,	477		
Casti's animali parlanti,	544	4	476
Cataract in the eye, New mode			476
ration for removal of,	224	0 1	479
Ceby's opuscules lyriques,	236 230		
Champion's miscellanies,		_	360
Chapman on the education of the ranks of the people,	107	tutions of medicine,	224
Chemical nomenclature,	224	Dupré's neologie French diction	
Chemical and philosophical reser		Dapie's neologic French dieth	120
Chemical and philosophical rese	292	Duties of men in public professions	
Chemistry, Annals of	563	of an officer in the field,	120
Child's first book improved,	228	Dutton's sketch of the charac	
Children in the wood, New,	472	George III,	118
Chinese inscription, The most an		Duty of officers commanding de	
And the second second	287	ments,	246
Christian religion, Illustration	of the		
truth of the,	371	EARLE'S new mode of operation i	or re-
Clark's memoranda legalia,	467	moval of cataract,	224
Clarke's tabulæ linguarum,	228	Economy of human life, French	
survey of the strength and		lation of,	118
lence of G. Britain,	180	Education of lower ranks of pe	
Clergy, Proposals for new arrang			107
of revenue and residence of,	341	Edwards's edition of Willis's Surv	
Coal-trade, Letter on the carryin		St. Asaph,	227
of the,	356	Egypt, Abdollatiph's history of,	241
Cogan on the passions,	196	, Memoirs on,	508
Colls's ode to peace,	110 357	Travels in,	532
Commissary, The British, Commonable lands, On the appropri		Electors of G. Britain, Address to,	339 473
and inclosure of,	346	Elegy, Sketches in, Encyclopædia Britannica, Supple	
Companion to the medicine chest,			382
Complaint of Scotland,	95	Evenings at my grandmother's,	473
Comus, Italian translation of Mi		Evidence for the authenticity of	the
Comas, Transaction of Transaction	259	Apocalypse,	436
Consumptive persons, observation	ns on	Exercises, Devotional,	102
the management of,	336		
Cooke's circular Atlas,	81	FABER's Hora Mosaïca,	445
Coombs (Wm.), Account of the	work	Facts respecting high prices of	pro-
of grace in the life of,	104	visions,	359
Coote's history of the union of	Great	Family stories,	473
Britain and Ireland,	441	Father and daughter,	114
Cottle's John the baptist,	353		gan's
Covenants (Religious)-Inquiry	into	" Comparative View ' of,	462
their obligation upon posterity,	221	Fisher's Valley of Llanherne,	474
Credit (Public) in danger,	461	Flowers of Persian literature,	418
Crowfoot's observations on Lange		Fox's Bagatella,	107
opinion respecting apoplexy,	223	FOREIGN LITERATURE.	EMM
Cutspear's Dramatic rights,	479	France,	577
DATITECT Winshaster assiss as	-	Germany,	585
DAVIES's Winchester assize ser	342	Italy, France, History of,	591
Dann's chamical and philosophic			
Davy's chemical and philosophics searches,	292	Franklin (Dr. B.)'s works,	577 479
Deists, Short method with the	340	French grammar,	227
Denon's travels in Egypt,	532	and English Idioms compared	
Dermody's poem of Peace,	109	Friend of women,	119
Devotional exercises,	102	Friends, Appeal to the society of,	103
7		,,, to the society of	

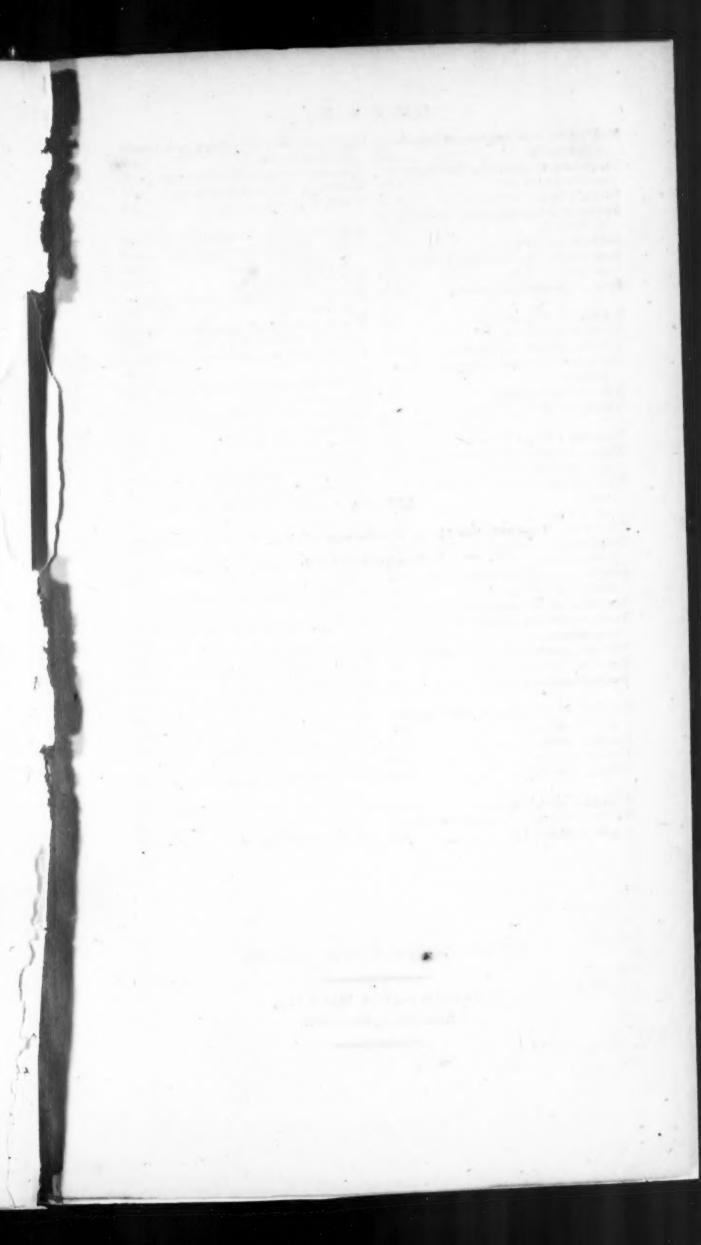
INDEX,

GARNETT'S thanksgiving	ermon,		oirs o
Gates, Inquiry concerning the	hanging	Invasions of British islands, Hist	
and fastening of,	239		340
Geographical companion to Mrs			
mer's histories,	472		
questions,	228		451
George III, Sketch of the princip	118		591
tures of the character of, Germany, Literature of,	585		474
Gleig's supplement to the Encycle			343
	60, 382		
Globes, Introduction to the use		Atlantis of Plato,	78
Gonorrhea virulenta, Observati			405
Gordon's history of the Irish Re			
Gospel testimony,	104	John the baptist, a poem,	353
Grace (Work of) in the life		lones (Rev. Wm.)'s works,	399
Coombs,	105	Journals, Spirit of the public,	360
Grammar, Latin,	473	January a france,	
Granada, Civil wars of,	82	KAMOULA, Adventures of,	473
Gray (Susan), History of,	472	Kelly's elements of book-keeping.	348
Gregory's astronomy,	349	Kentish's Cases of cancer,	469
Grose's sermons,	101	Kerslake versus life-insurance of	office,
Gross's duties of an officer in the	e field,	Second trial in the cause of,	345
_	120	Kipling on the XXXIX articles,	456
Guildford, History of,	225	Klaproth's essays for promoting	che-
Guisy's new method of learning I		mical knowledge of mineral	sub-
	227	stances,	201
Gunning (Miss)'s Family stories		I ACRYM & Hibernian	256
Heir apparent	, 477	LACRYM Æ Hibernieæ, Lamentation, a poem,	229
HAGER on Babylonian inscri	ntione	Lands (commonable and intermi	
	153	On the appropriation and inclosu	re of,
Hall's reflexions on war,	287 466	Langslow's historic sketch of the co	346
Halloran's lacrymæ Hibernicæ,	236	versy upon apoplexy,	468
Happiness, Thoughts on,	354	opinion respecting apop	
Harris's works,	259	Observations on,	223
Hawker's account of the work of		Latin tongue, Introduction to the,	473
in the life of W. Coombs,	104	Laureat, Satiric epistle to the poet,	
Heir apparent,	477	Law (military), Essay on,	394
Hints to legislators,	118	Laws, Alphabetic digest of the,	467
Holloway's peasant's fate,	232	Lectures (Heads of) on the institut	tions
Holmes's tour in Ireland,	451	of medicine,	224
Holy land,	549	Legislators, Hints to,	118
Home's history of the rebellion in	1745,	Le Kain, Memoirs of,	573
	142	Le Mesurier's British commissary,	357
Horæ Mosaïcæ,	445	Leslie's short method with the deists,	
Horkstow, Mosaic pavements at,	330	Lewis XVI, Memoirs of the reign	
Houghton's sermon,	103	Lauissannhia peologies Gallies	23
Houlton's letter respecting the le	- 460	Lexicographia neologica Gallica, Leyden's edition of the Complay	
Howlett's inquiry concerning the		Scotland,	95
ence of tithes on agriculture,	346	Life-insurance office, Second tria	_
II I HETD ATTONE OF ALL ALL	of 41	cause of Kerslake against,	345
ILLUSTRATIONS of the truth		Lilliput, Cabinet of, Lottery scheme, Letter respecting,	460
Christian religion,	371	Lowe on preaching the word,	219
India guide,	170	Lysons' mosaic pavements,	330
Infedeltà punita,	355 105	Lysons inosaic parements,	000
Insanity, Annals of, Inscription found at Rosetta,	-	MABEL Woodbine,	472
on,	515	Mahon's Médecine légale, 2 S 2	571
		* * *	

Mackenzie's voyages through America,	North 121	New Children in the wood, Evenings at my grandmother's,	472 473
Magee on atonement and sacrifice			114
's sermon on the death of t			477
of Clare,	342		477
Malmesbury (Earl of)'s edition of	f Har-	Historical tales,	113
ris's works,	259	Mabel Woodbine,	472
Maltby's illustrations of the truth	of the	Splendid misery,	112
Christian religion,	371	Susan Gray,	472
Manuel de tous les ages,	118	White knight,	476
Marsh's translation of Michaeli	s's in-		
troduction to the New Test		OFFICER in the field, Duties of an	,120
1, 184, 31		Officers commanding detachments,	Duty
Marshall on the appropriation as	nd in-	of,	240
closure of commonable lands,	346	Olivier's travels in the Ottoman em	pire,
Matthews on the scarcity and de	earness	&c.	301
of cattle, &c.	119	Ophthalmy, Treatise on,	105
Mechanic, a poem,	235	Opie (Mrs.)'s Father and daughter,	114
Médecine légale,	571	Opuscules lyriques,	236
Medicine, Heads of lectures on t	the in-	Orthographical exercises,	348
stitutions of,	224	Otaheite cane, Letters on the cul	tiva-
Medicine-chest, Companion to th	e, 346	tion of the,	240
Melville's White knight,	476	Otaheitean islands, History of,	240
Memoranda legalia,	467	Ottoman empire, Travels in the,	301
Metaphysics of Aristotle, Trans			
of,	251	PARENTS' friend,	106
Michaelis's introduction to the	New	Parker on the hanging and fastening	ng of
Testament, 1, 184, 313		gates,	239
Military law, Essay on,	394	Parnassus (British) at the close of	
Millin's Monumens antiques inédit	s, 551	18th century,	110
Mineral substances, Essays for pron	noting	Passions, Philosophical treatise on	the,
chemical knowledge of,	201		196
Mineralogy of Scottish isles,	405	Pasture land (Observations on the	
Misery, Splendid,	112	verting of) into tillage,	471
Mitchell's plans and views of buil		Paternal present,	117
	323	Paxton on the obligation of religious	
Monfoons, Observations on the,	11	venants,	221
Monumens antiques inédits,	551	Peace, a poem,	109
More (Hannah)'s meeting - h		Poem on the,	234
Truths respecting,	358	- Ode to,	110
Morgan's "Comparative View of		- Observations on the defin	
public Finances," Investigation		treaty of,	338
	462	The only security for,	467
Morley's poem of the Mechanic,	235	Peasant's fate,	232
Morrice's friend of women,	119	Pennsylvania, Fragments of the nat	
Mosaïc records, View of the,	445	history of,	119
pavements at Horkstow,	330	Perfect's annals of insanity,	105
********* ** *** *** ***		Persian literature, Flowers of,	418
NATURAL history, New edition		Perspective, Elements of,	120
Buffon's,	558	Philosophical transactions of the R	and the
, White's works in		Society for 1802,	361
Nature, General system of,	334	Flans and views of buildings in Eng	
-, Surveys of,	228	and Scotland,	323
Neologic French dictionary,	120	Playfair's statistical breviary,	76
Noble on ophthalmy,	105	Pleasures of retirement,	231
Northern counties of England,	Tour	Pluralities and non-residence, Nece	
through,	87	of the abolition of,	222
Nottinghamshire, Antiquities of,	225	FOETRY.	108
Novels, Romances, &c.	480	Bagatella,	107
Adventures of Kamoula,	473	British Parnassus at the close of	
Algerine captive,	113	18th century,	110
Amiable tutoress,	107	Champion's miscellanies,	230
Birth-day,	472	Civil wars of Granada,	82
Cabinet of Lilliput,	472	Complayat of Scotland,	95

Holy Land,	349	St. Asaph, Survey of,	227
Infedeltà punita,	355	Scarcity and dearness of cattle,	&cc.
Jacobinism,	474	Remarks on the cause and progress	of,
John the baptist,	353	and the second s	119
Lacryma Hibernica,	236	Science revived,	39
Lamentation,	229	Scotland, Remarks on local scenery	and
Mechanic,	235	manners in,	58
Ode to peace,	110	Scott's proceedings of the Sussex A	gri-
Opuscules lyriques,	236		471
Peace,	109		405
Poem on the peace,	234		478
Peasant's fate,	232	20	478
Pleasures of retirement,	231		218
Poems and ballads,	352	Butcher,	467
Poverty,	351		342
Rainy day,	111	Garnett,	465
Rural tales,	67	Hall,	466
Satiric epistle to poet laureat,	112	Houghton,	103
Sketches in elegy,	473		343
Thoughts on happiness,	354	Lowe,	219
Union,	110	Magee,	342
Valley of Llanherne,	474	Polwhele,	220
Vision of Alfred,	39	Prosser,	221
	355	Sharpe,	104
Polidori's Infedeltà punita,		Taprell,	464
Italian version of Mi		Townsend,	104
Comus,	239	Vincent,	463
Polwhele's assize sermon,	220		342
Pott's duties of men in public profes		Wilson, Wood, 219,	
D. 14-2	104		465
Poulter's proposals for new arrange		SERMONS, by Baseley,	210
of revenue and residence of clergy		Grose,	101
Poverty, a poem,	351	Magee,	53
Preaching the word, Sermon on,	219	Wickes,	49
Prosser's sermon,	221	Shakspeare's second part of Henry	
Provisions, Facts respecting high			475
of,	359	Sharpe's sermon,	104
Pye's new chemical nomenclature,	224	Shepherd's charge to clergy of Bedi	
D 4 73777 1			343
RAINY day,	111	Sketches in elegy,	473
Ranken's history of France		Slave-trade, Address on the,	463
Rebellion in 1745, History of the,		Society for encouragement of	
in Ireland, History of the		,	263
Reid's address on the slave-trade,	463	Solomon's song, New translation	
Researches, Chemical and philos		6 (511 131 37 61	177
cal,	292	Somerville (Elizabeth)'s New Chile	
Retirement, Pleasures of,	231		472
	ivate	Mabel Wo	
wrongs and public ruin,	461		472
Reviewers' answer to correspondent	t, 479	Birth-day,	
Rights, Dramatic,	479	Song of Solomon, New translation	of,
Robertson's life and writings, Acc	-	C	177
of,	130	Sonnini's edition of Buffon's nat	
	Civil	**	558
Wars of Granada,	82	Soulavie's memoirs of the reign of Le	
Rosetta inscription, Letter on,	515	XWI,	23
Rousseau's Flowers of Persian litera	ature,		476
	418	Truths respecting Han	
Rural tales,	67		358
Russel's Hints to legislators,	118		112
		Statistical breviary,	76
SACY (De) on the Rosetta inscrip	otion,	Stewart's account of the life and write	ings
	515	of Dr. Robertson,	150
		,	

Stoddart on local scenery and man		Vandeleur's duty of officers command-
in Scotland,	58	Ventum (Harriet)'s annual factor 240
Sugar-cane of Otaheite, Letters on cultivation of the.	240	Ventum (Harriet)'s surveys of nature, 228
Surr's Splendid misery,	112	Vincent's thanksgiving sermon, 463 Vision of Alfred, 39
Survey of the strength and opulence		Vision of Anied,
G. Britain,	180	WAKEFIELD'S investigation of Mor-
Surveys of nature,	228	gan's "Comparative view of the pub-
Sussex agricultural society, Proceed		lic finances," 462
of the,	471	War, Reflections on, 466
System (General) of nature,	334	Warner's tour throughnorthern counties of England, 87
TABULÆ linguarum,	228	Wastes (Inquiry into propriety of apply-
Tales, Eight historical,	113	ing) to maintenance of poor, 469
Taprell's sermon on the peace,	464	Way to speak well, made easy for youth,
Taylor's translation of Aristotle's M		228
physics,	251	Welbeloved's devotional exercises, 102
Taylor's India guide,	170	White knight, The, 476
Testament (New), Introduction to	the,	White's edition of Abdollatiph's history
1, 184, 313,	425	of Egypt, 241
Thomson's British Parnassus,	110	works in natural history, 412
Tithes (Inquiry concerning influ	ence	Wickes's sermons, 99
of) upon agriculture,	346	Williams's translation of the song of So-
Tour through northern counties of I		lomon, 77
land,	87	Willis's survey of St. Asaph, New edi-
in Ireland,	451	tion of, 227
Townsend's Gospel testimony,	104	Wilson's sermon at Foundling hospital,
Transactions of society for encour		342
	263	Wilson (Miss)'s Lady Geraldine Beau-
	oyal	fort, 477
	361	Winds and monsoons, Observations on
	301	Warran Appedetes of bassis and last
Truths respecting Hannah More's m		Women, Anecdotes of heroic conduct
Turton's general system of nature,	358 334	of, 360 Women, Friend of, 119
Tutoress, The amiable,	107	Wood's elements of perspective, 120
	394	funeral sermon, 219
Tytier on mintary law,	007	—— thanksgiving sermon, 465
UNION of G. Britain and Irela	nd	Wrangham's Holy land, 349
***	441	edition of Leslie's Short
	110	method with the deists, 340
	500	,
	476	YORKSHIRE, Agriculture of W. Riding of, 271
VALLEY of Llanherne,	474	Young on the application of waste lands
Valpy's alteration of Shakspeare's sec		to the maintenance of the poor, 469
	476	Yu, Monument of, 287



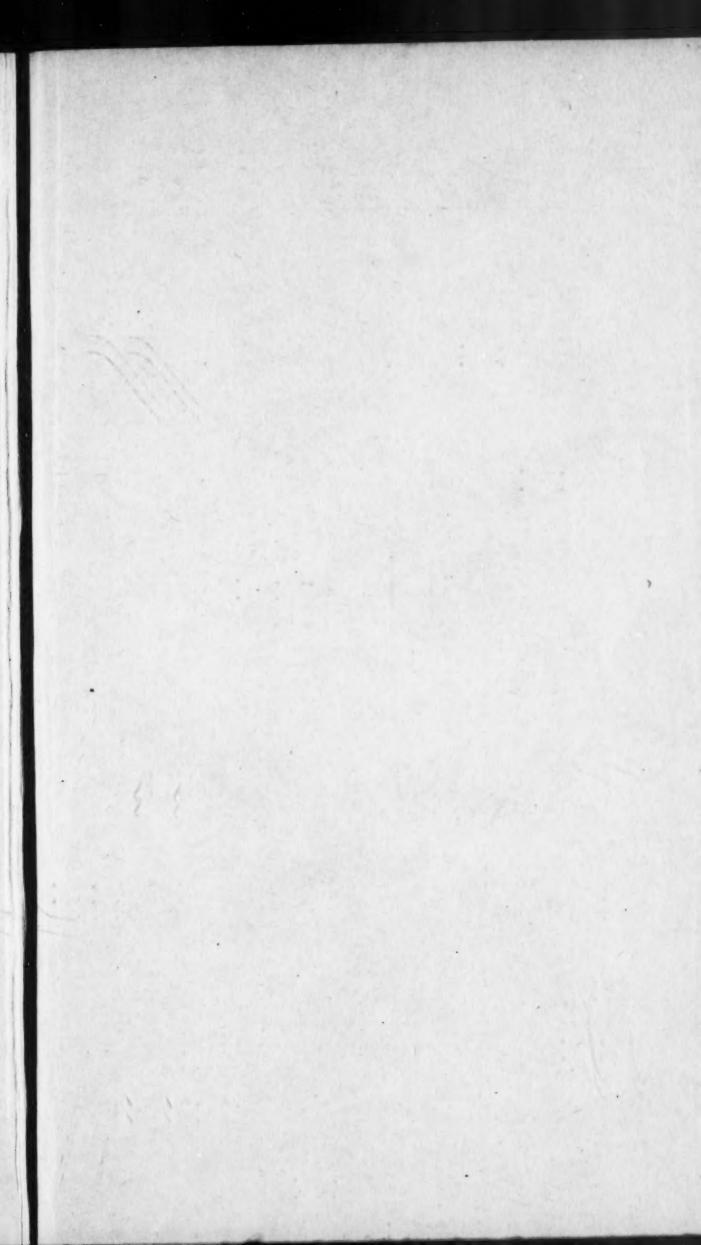
ERRATA.

Page 289, line 14, for Visdelon read Visdelon.
290, - 8, for Count read Court.

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